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ABSTRACT

This study investigated the construct of effectiveness as it applies to public libraries and developed a methodology that can be transferred to other types of libraries and organizations. The research team began by compiling a list of indicators that are commonly used to gauge library effectiveness within the areas of: (1) services access; (2) internal administrative processes; (3) administrative resources; (4) community relationships; (5) materials; (6) service output; (7) physical plant; (8) broad social impact; (9) service offering/fit with community; (10) service quality; (11) staff; (12) internal technical processes; and (13) user population/market penetration. A mail questionnaire was sent to members of seven major constituencies of public libraries at 84 sites, and an overall response rate of 89.8 percent was achieved. The survey asked library managers, library service personnel, library trustees, library users, friends of the library, local officials from the library's funding jurisdiction, and community leaders with influence on library decisions, which indicators they most preferred. Librarians were also asked to rate their library's performance for each indicator. It was concluded that, although libraries which place priorities on different roles have different performance profiles for the indicators included on the survey, there is more agreement than disagreement among the various public library constituents as to what constitutes effectiveness. (28 references) (SD)

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THE PUBLIC LIBRARY EFFECTIVENESS STUDY:

FINAL REPORT

August 1989

Drexel University
College of Information Studies
Philadelphia, PA

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EXECUTIVE SUMMARY

Research on organizational effectiveness has focussed on three crucial questions: the definition of the concept, or construct, of organizational effectiveness; the development of measures of organizational effectiveness; and the identification of the determinants (predictors) of organizational effectiveness. The definition and measurement of library effectiveness have developed in two general areas: standards for libraries, which have tended to be highly prescriptive and to emphasize resource inputs, and measurement of library services, oriented towards service outputs.

The research literature on organizational effectiveness offers many models, which emphasize different aspects of organizational performance or values and which may be appropriate under different organizational circumstances. Individuals or groups in the same organization may adopt different models in evaluating an organization. Attempts to identify a single measure of effectiveness have given way to attempts to identify the (multiple) indicators and dimensions of effectiveness. The implication for libraries is that any of several effectiveness models may be apporpriate; and that it may be fruitful to identify the indicators and dimensions of library effectiveness.

Indicators are criteria at a slightly more abstract level than measures; they can be grouped into dimensions (broad categories), which reflect the different components of an organization's effectiveness. Indicators of effectiveness are specific to the organization's functions or domains.

PURPOSE OF THE STUDY

The purpose of the present research is to investigate the construct of effectiveness as it applies to public libraries and to develop a methodology that can be transferred to other types of libraries and possibly other kinds of organizations.

The major questions addressed by this study are:

1. What are the indicators and dimensions of public library effectiveness?

2. Do constituent groups differ in their preferences among indicators and dimensions, and in their definitions of public library effectiveness?

3. Do differences in individual libraries' domains affect their constituents' preferences concerning effectiveness or organizational performance on the indicators?

METHOD

The approach taken in the study was to list comprehensively the indicators that had been used previously; to reduce the list to a non-redundant set of items of comparable levels of specificity and of a manageable length; to evaluate empirically the usefulness of the indicators; from the indicators, to develop dimensions of library effectiveness; and to relate the indicators to public library roles or service domains.

Members of seven major constituencies of public libraries were asked their preferences for each indicator as a descriptor of public library effectiveness. Also, librarians were asked to rate their libraries' performance on each indicator. The indicators were grouped into dimensions through factor analysis of all groups' preferences, and of librarians' performance ratings.

In addition, librarians were asked to identify their libraries' service roles, using a paraphrase of the role statements written for the Public Library Development Project.

SAMPLE

The findings of empirical research on organizational effectiveness are highly dependent on which constituent groups are included, as different constituent groups have different priorities. The constituent groups surveyed for this study were:

Library managers at the highest level of the library
Library service personnel who serve the public directly, in a professional capacity
Trustees of the library, elected or appointed
Users chosen as they come through the library's doors
Friends of the Library group members, or equivalent, currently active
Local officials from the library's funding jurisdiction, with an official role related to the library, elected or appointed
Community leaders who have some influence, direct or indirect, on library decisions

One group not explicitly included was library non-users, that is, members of the community who are not library users. The difficulty of surveying a reasonable sample of this heterogeneous group in each of the communities in the study made their inclusion infeasible.

A heterogeneous sample of libraries was chosen by stratifying public libraries by region and by size of population served. A random sample of public libraries was drawn from The American Library Directory. Library directors at the selected sites were asked to help in (1) identifying individuals inside and outside the library who should receive questionnaires, following the study criteria, and (2) distributing questionnaires to the external constituents (local officials, community leaders, and library users). Eighty-four directors agreed to participate in the study.

STUDY INSTRUMENTS

A mail questionnaire was chosen as the survey instrument to permit wider dispersion of study sites and a larger number of subjects than would be afforded by interviews. Questionnaires were sent to individuals at 84 sites: the Preference Questionnaire to every person in the sample, and the Performance and Roles Questionnaires to librarians. Directors were asked to distribute questionnaires to local officials and to community leaders, and to administer user questionnaires. Demographic information was also requested from each respondent.

An overall response rate of 89.8% was achieved, with the desired regional and library size distribution.

MAJOR FINDINGS

The central conclusions of the study relate to indicators of public library effectiveness (those characteristics that describe a library's effectiveness) and the dimensions (broad categories, or groupings) derived from them. The indicators most preferred by all constituent groups (in the top ten for all constituents) relate to quantities and qualities of service, and access to service.

The dimensions of effectiveness derived from the preference question were named:

Outputs and Inputs
Internal Processes
Community Fit
Access to Materials
Physical Facilities
Management Elements
Service Offerings
Service to Special Groups.

The indicators on which library performance was rated most highly by the two librarian groups include:

Intellectual Freedom,
Free-ness of Services,
two items related to staff-user contact,
two items related to use (Circulation and Equipment Usage),
two items related to users (Public Opinion and Variety of Users),
one item related to materials, and
one item related to relations with other libraries.

Those on which performance was rated lowest were:
four items of community relations (Public Relations, Awareness of Services, Community Analysis, and Public Involvement in Library),
two staff items (Staff Size and Staff Expenditure),
two areas of perennial concern (Board Activeness and Parking),
Energy Efficiency, and
Library Products.

The dimensions of effectiveness derived from the performance question were:

Usage and Community Impact
Materials
Staff
Management Quality
Expenditures
Building
In-Library Services
Community Fit
Public Involvement
Building Access
Larger Materials Issues
User Reaction
Miscellaneous

The four most popular public library roles, as identified by the librarian respondents, were:

Reference Library
Popular Materials Center
Preschoolers' Door to Learning
Community Information Center

Factor analysis was used to reduce the role choices to two internally correlated sets: One encompasses roles with a longer public library tradition; the other, roles that are newer, relatively more progressive, or require special library resources.

Organizational domain, or role choice, does influence library performance, as expected. Libraries that place priorities on different roles have different performance profiles on the indicators included in the survey. It was considered possible, though the arguments are less compelling, that an individual's role choices would affect his or her indicator preferences. No such link was found.

An interesting sidelight to the roles investigation is the lack of consensus on their library's current roles among librarians within the same library. This suggests a potential management problem as well as an interesting evaluation issue: people with different expectations of the same library can be expected to differ in their evaluation of that library.

The most surprising conclusion of the study is that there is more agreement than disagreement among the various public library constituents as to what constitutes effectiveness. Several explanations can be advanced as to why substantial differences are not evident in the data. First, there may be a conventional view of the public library that is generally shared among the citizenry, and that view does not change substantially when one moves from positions outside the library to positions inside the library or from general citizenry (Users) to elite citizenry (Local Officials and Community Leaders). The well-established "halo" effect that surrounds the public library -- an essentially non-critical, positive view of the public library institution held by the general populace -- lends credence to this explanation.

The second possible explanation is that the instrument is not sensitive enough to discern differences across constituent groups. Given that differences among constituent groups were registered for selected indicators, this explanation lacks plausibility.

Third, the method of sampling -- essentially, selection by the library directors -- may have biased the sample toward similarity of perception. This explanation cannot be countered without replication on randomly selected subjects. However, it can be argued that the responses from selected respondents yield more thoughtful answers; and that a study whose purpose is to build models, rather than to represent the universe proportionally, is served best by a selected sample of attentive respondents rather than a probability sample.

While the sampling method does not permit generalizing to the nation's libraries, the breadth of library sizes, geographic regions, and constituent types and the volume of response in every constituent group suggest that the findings would be replicated in a national study with purely random sampling. The high response to the survey instruments implies, first, that the issue of effectiveness is salient among people inside and outside the library and, second, that even busy local officials and community leaders will respond to a survey about public library matters, where an appropriate method is used. The one employed for this study worked and is worth using again.

LITERATURE REVIEW
and
STATEMENT OF THE PROBLEM

1.0 EFFECTIVENESS

The construct of organizational effectiveness is central to management and management research, yet it has eluded researchers and managers. A vast amount of literature ranging across several fields has been devoted to this topic.

The question of organizational "goodness" or effectiveness is actually a question in three parts:

1. What is an effective organization?
2. How do we know effectiveness when we see it?
3. What makes an organization effective?

In research terms, the questions translate into:

1. The definition of the concept, or construct, of organizational effectiveness;
2. The development of measures of organizational effectiveness;
3. The identification of the determinants (predictors) of organizational effectiveness.

The definition and measurement of effectiveness in libraries, like other service organizations, especially those in the nonprofit sector, is ambiguous because of intangible outputs, shifting goals, indeterminant technology, multiple constituencies, and vulnerability to the political process.

During the last 20 years, considerable effort has been devoted to the issue of library effectiveness, but without a research base. The emphasis has been on developing specific, practical measures. The larger issues of the conceptual basis for such measures and the appropriate statistical methods of developing and validating measures have not been addressed.

However, organizational effectiveness is not an issue unique to libraries, and researchers in other fields have devoted considerable attention to it. They have used approaches and techniques that may be of use to libraries. Libraries offer an opportunity to test and extend those approaches and techniques.

The purpose of the present research is to apply the models and methods of organizational effectiveness research to libraries, and to extend our understanding of organizational effectiveness, especially in public sector service organizations, by studying libraries. The present research is focussed on public libraries, which is to some extent a prototype: the approaches and methods developed by this project should be readily adapted to other kinds of libraries.

1.1 LIBRARY EFFECTIVENESS

The definition and measurement of library effectiveness can be traced through developments in two general areas: standards for libraries, and the measurement of library services. In public libraries, state and national standards have been used to indicate to local governments what constitutes adequate library services and support. Until the mid-1960s, the Public Library Association (a division of the American Library Association) published standards for U.S. public libraries. The standards tended to emphasize resource inputs, and they were highly prescriptive, with little accommodation for local variations.

In the 1960s researchers began to use quantitative methods to measure library performance. A number of researchers addressed the evaluation of specific services, such as reference (Crowley and Childers, 1971) and document delivery (Orr and others, 1968b). (Lancaster, 1977, presents an excellent summary of the literature through the mid-1970s.)

One of the conceptually broadest of the early efforts was that by Hamburg and others (1974) to develop a single overall measure of public library performance. They concluded that the major function of libraries is to expose people to records of human knowledge. So they proposed item-use hour as the basic measure of library outcome: every library use (circulation of materials, reference questions, etc.) was translated into user time in contact with documents, which was then summed across services to a single total.

Also in the 1960s DeProspo and others (1973) developed and tested a set of measures that covered many major public library functions. Unlike Hamburg, they presented multiple measures, related to the public library's multiple services and easily implemented by library staff. Like Hamburg's item-use hour, the measures were oriented to service outputs rather than resource inputs or internal processes.

In the 1960s, as well, public librarians began to question the validity of national standards for public libraries. There had long been widespread discontent with the various editions of the Public Library Association (PLA) standards -- the primary complaints being that they were irrelevant (too high, too low) to many libraries, were arbitrary rather than founded in empirical data, and were overwhelmingly standards for input. The sentiment that took form in the 1960s and 1970s was that libraries are local institutions; that public libraries do not subscribe to a universal mission; and that, therefore, each library should be judged by local criteria that address the local library mission.

In place of the standards PLA sponsored the publication of A Planning Process for Public Libraries (Palmour and others, 1980), which described a process by which local libraries could do local planning and evaluation. In harmony with the strong measurement and service output thrust of A Planning Process, PLA published a handbook for measuring public library outputs, Output Measures for Public Libraries (Zweizig and Rodger, 1982). Drawing heavily on DeProspo and others, it presented a set of service-oriented measures reflecting activities common to a large number of public libraries.

In 1987, the Public Library Association sponsored the production of a new planning manual (McClure and others, 1987) and a revised output measures manual (Van House and others, 1987). An innovation of the new planning manual was a set of role statements describing common public library service emphases. The manual suggested that the role statements could be used by a public library to define its mission.

In addition, PLA created a mechanism for collecting and publishing output measures data from libraries nationwide (Public Library Association, 1988). It was not intended that the data be used to establish national norms. However, several states now require that local libraries engage in planning and measurement to qualify for state aid, and in some cases benefits are tied to levels of achievement on the measures; yet the reliability and validity of these measures have not been tested (D'Elia, 1988).

The primary effect of PLA's planning and measurement manuals has been to offer public libraries a variety of ways of conceiving their missions and, consequently, of conceiving their effectiveness; and to increase the measurement of public library effectiveness, but without prescribing levels of achievement. Even the output measures manual, which conceivably could define public library effectiveness, does not prescribe measures, but offers a number of options. It encourages local libraries to adopt the measures that they consider most appropriate, and to develop new ones as needed.

This approach has made the definition of public library effectiveness dependent on the individual library's mission, goals, and objectives -- that is, on the domain in which the library chooses to operate and the preferences of local constituencies. More than ever, the concept of the public library and how one judges its effectiveness is situational. The advantage of this approach is its flexibility and sensitivity to local conditions. The major disadvantage is that it leaves wide open the questions: What is a good public library? How do we know how well a specific library is doing?

A hint of the problems associated with identifying goodness of public libraries can be found in the Library Research Center's recent attempt to identify outstanding public libraries. They (1) polled state librarians on their opinion of the best libraries in their respective states with regard to overall services and administration and (2) selected the 50 of those libraries which had the highest combined rank of budget and circulation. It is debatable whether these criteria reflect effectiveness and whether, therefore, they resulted in a list of the "best" libraries.

1.2 THE LITERATURE OF ORGANIZATIONAL EFFECTIVENESS

Organizational effectiveness (OE) is a pivotal concept in management research. Some say that the ultimate goal of all management research is to make organizations more effective.

1.2.1 THE DEFINITION OF ORGANIZATION EFFECTIVENESS

At least four general approaches to defining organizational effectiveness have been proposed. The goal (Cameron, 1981) or rational system model (Scott, 1987) views organizations as instruments designed to achieve specific ends, and measures effectiveness by goal achievement. It assumes that organizational participants can agree on a finite set of goals of sufficient specificity.

The process (Cameron, 1981) or natural systems model (Scott, 1987) says that organizations do not exist solely to attain their goals. They are also social groups seeking to survive and maintain their equilibrium, presumably as a means toward achieving their goals, but sometimes even to the detriment of the purpose for which they were established. Effectiveness is measured by goal attainment but also by internal processes and organizational health.

The open systems (Scott, 1987) or system resource model (Cameron, 1981) emphasizes the organization's need to acquire resources from its environment. Resources are controlled by external groups. The effective organization responds to the demands of its environment according to its dependence on the various components of the environment for resources (Pfeffer and Salancik, 1978).

The multiple constituencies (Zammuto, 1984) or participant satisfaction model (Cameron, 1981) is concerned with the organization's relationship with its constituent groups. It defines effectiveness as the degree to which the needs and expectations of strategic constituencies are met. It differs from the system resource model in that the constituencies to be satisfied are not necessarily the power elite.

These models are not necessarily contradictory, but may be seen as emphasizing different aspects of organizational performance or values (Quinn and Rohrbaugh, 1983). Furthermore, different approaches may be appropriate under different organizational circumstances (Cameron, 1981) such as at different life-cycle stages (Cameron and Whetten, 1981), Different constituent groups of the same organization, and even different members of a constituent group, may adopt different models of effectiveness in evaluating an organization.

1.2.2 INDICATORS AND DIMENSIONS OF ORGANIZATIONAL EFFECTIVENESS

Recent research has shown effectiveness to be a multidimensional construct (Cameron, 1978; Jobson and Schneck, 1982; Quinn and Rohrbaugh, 1983). Early attempts to identify a single overarching measure of effectiveness have given way to attempts to identify the (multiple) indicators and dimensions of effectiveness.

For most types of organizations, a variety of indicators already exist in the form of measures that have been used by researchers and practitioners for different purposes at different times. The research problem, therefore, is not developing indicators, but rather identifying the indicators that have been used; reducing the indicators to a consistent, nonredundant set; and identifying the underlying criteria, or dimensions, reflected by the indicators (Quinn and Rohrbaugh, 1983).

Measures are indicators operationalized; indicators are criteria at a slightly more abstract level than measures. Indicators can be grouped into dimensions, or broad categories, which reflect the different components of the construct of organizational effectiveness.

Indicators have been grouped into dimensions in at least four ways. First, investigators have grouped indicators intuitively. This was the approach used by Cameron (1978) in a study of organizational effectiveness in higher education. He justified this approach on the grounds that there is no one "true" grouping; rather, groupings are derived from the exercises of judgment, and investigators' judgments are as valid as those of any other knowledgeable observers. He subsequently confirmed his *a priori* dimensions empirically from indicators developed to reflect his *a priori* dimensions (Cameron, 1978; Cameron, 1981; Cameron, 1984; Cameron, 1986; Cameron and Whetten, 1981). His indicators and dimensions are, naturally, specific to higher education.

A second approach is to ask an appropriate population to rate the similarities among a set of indicators. Similar indicators are then collapsed into dimensions. This approach requires a set of indicators small enough for individuals to make pairwise comparisons. Quinn and Rohrbaugh (Quinn and Rohrbaugh, 1981; Quinn and Rohrbaugh, 1983) started with a list of indicators from the OE literature. They asked experts who had published in the field of OE to rate the similarities of all possible pairs of these indicators. They then used multi-dimensional scaling to define three effectiveness dimensions:

1. Organizational focus: internal vs external, person vs. task.
2. Structure: stability and control vs. change and flexibility
3. Degree of closeness to desired organizational outcomes (means vs. ends).

They then related these dimensions to the different models of OE outlined above.

A third approach is to use ratings of organizational performance to group those indicators to which organization performance is correlated. This approach requires adequate data on organizational performance on each indicator. Cameron (1978, 1981) used subjective measures of the effectiveness of higher education institutions. He asked university faculty and administrators to rate their organizations' performance on a set of effectiveness criteria, then used psychometric tests on their responses to confirm the dimensions that he had previously developed intuitively. Jobson and Schneck, 1982, in a study of police effectiveness, asked both police officers and community members to rate their police departments' effectiveness, from which they derived ratings that they related to objective indicators.

A final approach to deriving dimensions is to ask appropriate respondents to judge the usefulness of each indicator in describing an organization's effectiveness. As with the measurement of organizational performance, correlations among subject's judgments on the indicators themselves can be used with data reduction methods to derive dimensions. Presumably people will judge as most useful the indicators that reflect their most important criteria.

1.2.3 CONSTITUENCIES

A basic question in the evaluation of effectiveness is: from whose perspective is effectiveness being judged (Cameron and Whetten, 1983)? Different groups may have different priorities and may evaluate the same organization differently. They may also use different models or definitions of effectiveness in evaluating the same organization.

Evaluators must limit the constituencies included to a tractable number; and this choice requires the application of values. Several multiple constituencies approaches to OE have been proposed, each of which results in a different selection of constituencies' preferences to be satisfied, and/or a different method of reconciling differences across constituent groups (Zammuto, 1984).

Some research on organizational effectiveness has limited consideration to a single constituency, generally internal participants, sidestepping the issue of possible differences across constituencies. Cameron (1978, 1981, 1986) surveyed only the dominant coalition (university administrators and faculty department heads), on the grounds that as decision-makers their preferences were most significant.

In contrast, others have argued for the crucial importance of including external participants. From the system resource view, Pfeffer and Salancik (1978) argue for the importance of strategic constituencies in rewarding the organization with resources. From the rational goal perspective, Jobson and Schneck (1982) point out that there is no reason to expect consensus on goals across groups. They note that criteria reflect the self-interest of groups, and so an organization, particularly a public sector service organization, cannot be the sole judge of its own performance.

1.2.4 EFFECTIVENESS AND ORGANIZATIONAL DOMAINS

Early attempts to define a single measure or set of measures of effectiveness of universal relevance have given way to the judgment that research must proceed on a more specific basis, dealing with populations of similar organizations (Cameron, 1978; Campbell, 1977) or even case studies (Campbell, 1981). Most indicators of effectiveness are specific to the organization's functions, or domain. This is particularly true of public sector organizations where global financial indicators such as profit or return on investment are not generally applicable.

However, even similar organizations may operate in slightly or even radically different domains, as characterized by the clients to be served, technology employed, and products or services delivered (Meyer, 1975). Under the goal model of effectiveness, organizations with different goals need to be evaluated differently. In evaluating the performance of a specific organization, therefore, one may need to go beyond the simple description of organization type (for example, a public library) to look more closely at the organizations' domain or domains.

A single organization often operates in more than one domain, not equally effectively in each (Cameron, 1981). This may be particularly true of public sector organizations trying to satisfy a wide range of constituencies. Evaluating organizational effectiveness, therefore, may require that the evaluator explicitly unbundle the domains in which an organization is operating and evaluate each individually.

Different organizational participants may have different priorities among the domains available to an organization, as they do with the dimensions of organizational effectiveness. At the extreme, different people may have different definitions of what organizations of the same type do, that is, different concepts of the domains appropriate to an organization type. The criteria that people use to evaluate organizations may therefore differ, with each preferring the criteria that describe his/her definition of the organization's domain.

Cameron, 1981, sought to empirically identify the domains of a number of institutions of higher education, and to determine characteristics that explain differences in domains of effectiveness among them. He found that he could describe four distinct groups of universities and colleges that had distinct domains with different effectiveness profiles.

2.0 THE PRESENT RESEARCH

The purpose of the present research is to investigate the construct of effectiveness as it applies to public libraries and to develop a methodology that could be transferred to other types of libraries and possibly other kinds of organizations.

The major questions addressed by this study are:

1. What are the indicators and dimensions of public library effectiveness?

2. Are there differences among constituent groups in their preferences among indicators, dimensions, and/or definitions of public library effectiveness?

3. Do differences in individual libraries' domains affect their constituents' preferences concerning effectiveness?

2.1. INDICATORS AND DIMENSIONS OF PUBLIC LIBRARY EFFECTIVENESS

The literature of library and information studies has produced a laundry-list of indicators and measures, but with little theoretical rationale, and little attention to the underlying definition of effectiveness or dimensions of the construct. The approach taken in this study was to inventory comprehensively the indicators that had been used; to reduce the list to a non-redundant list of items of comparable levels of specificity and of a manageable length; to evaluate empirically the usefulness of the indicators; and to develop dimensions of library effectiveness.

2.1.1 INDICATORS

The existing literature was taken as the starting point in the identification of indicators of library effectiveness. An exhaustive list of indicators of public library effectiveness was drawn from the literature of library and information studies (including research literature, professional literature, and state standards) and from initial field interviews.

Open ended interviews were conducted with 27 people in the Delaware Valley and the San Francisco Bay Area during the fall of 1987. Subjects included library managers, professional and paraprofessional library service staff, library users and trustees, elected and appointed local officials, and community leaders. The interviews addressed general questions about the evaluation of public libraries and specific questions about indicators -- that is, about the information that respondents would find useful in evaluating libraries. Items gleaned from the interviews and the literature totaled 257.

The first step was to reduce the exhaustive list of measures by generalizing measures as indicators. The indicators were described as far as possible in terms understandable by the general public so that they could be used with non-librarians. The final list of indicators consisted of 61 items (see Table 4).

The findings of this study are critically dependent on choice of indicators. It would have been desirable to use the library constituents' responses to collapse the initial, exhaustive list, but pretests revealed that the list was too long and too redundant for respondents to endure. The initial list was therefore reduced by the investigators by collapsing similar indicators and raising them to a higher level of generality. For example, a set of measures related to circulation of library materials, such as total annual circulation, circulation per capita, and circulation by class of material, were collapsed into "number of library materials borrowed by users."

The usefulness of the 61 individual indicators was evaluated in two ways. First, members of major public library constituencies (described below) were asked to judge the importance of each indicator in describing public library performance to someone like themselves. This question addressed respondents' preferences for the indicators in discriminating among libraries.

Second, librarians were asked to rate their libraries' performance on each indicator. These ratings were used to determine the indicators on which libraries, on average, tend to perform well versus those on which they tend to perform poorly, and to show whether there was variation on each indicator, thus demonstrating its utility as a discriminator.

2.1.2 DIMENSIONS

A simple listing of indicators is of limited use in understanding the concept of library effectiveness because of the large number and diversity of indicators. To understand the boundaries of the construct space of library effectiveness requires that these indicators be generalized into the underlying concepts that, taken together, define library effectiveness -- that is, into dimensions of library effectiveness.

Dimensions were developed using three methods:

(1)The investigators intuitively grouped the indicators into dimensions ;

(2) The preferences of the public library constituents concerning the importance of each indicator in evaluating a library were factor analyzed to uncover underlying dimensions;

(3) The ratings by public librarians of their libraries' performance on each indicator were factor analyzed to derive dimensions. The performance-derived dimensions might or might not coincide with the preference-derived dimensions.

2.2 DIFFERENCES ACROSS CONSTITUENT GROUPS

Researchers following the multiple constituencies approach have proposed a variety of guidelines for which constituencies should be included in evaluations of organizational effectiveness and how their preferences should be weighted (Zammuto, 1984). A common thread, however, is that different constituent groups have different priorities. The result is that the findings of empirical research on OE are highly dependent on which constituent groups are included.

Public libraries serve many and varied constituencies. As publicly financed organizations, they seek to serve a broad cross-section of the community. Decisions about the library are made and influenced by a wide range of elected and appointed officials and community leaders. Many public libraries have boards of trustees, which may be administrative or advisory, whose role it is to set policy and to represent the interests of the community to the library (and of the library to the community). Many libraries also have Friends of the Library groups -- library users who volunteer their time and energy to help the library in a variety of ways, notably with political support and fundraising.

Prior research on library effectiveness has relied primarily on librarians' definitions of effectiveness and their judgments concerning which indicators are useful internally and with their external constituents. This study sought instead to identify empirically the preferences of major public library constituent groups.

The choice of constituent groups to include was based on interviews with public library directors and selected community leaders and elected and appointed officials -- the latter representing the power structure that controls library budgets. The constituent groups identified for this study comprised:

Internal constituents:
  Library managers at the highest level of the library
  Library service personnel who serve the public directly, in a professional capacity

Boundary-spanning constituents:
- Trustees of the library, elected or appointed
- Users chosen as they come through the library's doors
- Friends of the Library group members, or equivalent, currently active

External constituents:
- Local officials from the library's funding jurisdiction, with an official role related to the library, elected or appointed)
- Community leaders who have some influence, direct or indirect, on library decisions

One group not explicitly included was library non-users, that is, members of the community who are not library users. The difficulty of surveying a reasonable sample of this heterogeneous group in each of the communities in the study made their inclusion infeasible.

Preferences concerning indicators and the dimensions derived from them were compared across constituent groups.

2.3. ORGANIZATIONAL DOMAIN

One basic question in organizational effectiveness research generally has been the extent to which criteria are universal versus unique to the organization or type of organization being evaluated. Early attempts to find a single measure or set of measures of organizational effectiveness have given way to investigations of the appropriate measures for a set of similar organizations. The question for public libraries is the extent to which the same measures can be used for all public libraries versus whether measures need to be geared to the domain, or role choices, of an individual library.

The Public Library Association planning manuals (Palmour and others, 1980; McClure and others, 1987) espouse the uniqueness of each library, while the measurement manuals (Zweizig and Rodger, 1982; Van House and others, 1987) present a set of measures widely applicable across public libraries, implying that public libraries provide similar services on which their performance can be evaluated. McClure and others append to each role statement "Output Measures to Explore," suggesting the possibility that some measures are more appropriate to some roles, or domains, than others. The very tentativeness of McClure, however, suggests that the ties between roles and measures may be tenuous.

Organizational domain may affect respondents' ratings of the importance of indicators, as they choose indicators that best reflect performance in their library's domain. Organizational domain may also influence library performance on the indicators. If the roles serve to distinguish among libraries, one would expect libraries with similar role choices to have similar performance profiles, different from those of libraries with other roles choices.

This study tested for relationships between role choices, or domains, on the one hand, and indicator preferences and performance ratings, on the other. The role statements from McClure and others (1987), condensed to a paragraph each (Appendix I), were used to describe domain. Descriptions of the eight roles, and the time needed to read and reflect upon them, added considerably to the time required by the questionnaire. Therefore only librarians were asked to describe their libraries' roles.

An individual's choice of roles for his or her library may reflect either his/her perception of the library's current roles, which may not agree with others' perceptions or with management's choices; or his/her preferences for the library's roles, regardless of whether they are the library's current roles. Respondents were asked to report their perceptions of their libraries' current roles: "In your opinion, what is the importance of each role in your library's current program of services? Rate for your whole library system."

Librarians' role choices showed a wide range of variability within each library, indicating an interesting lack of consensus on perceived organizational domain. Library directors responses were therefore taken as definitive for their libraries.

RESEARCH METHOD

1.0 SAMPLING

1.1 LIBRARIES

Cronbach (1986) notes that the social science researcher dealing with heterogeneous situations may choose from three possible sampling strategies. The first is to draw a large and representative sample and report an overall statistic. The knowledge gained can then be applied to aggregates whose makeup matches the sample. The disadvantages are two: the required sample size may exceed the researcher's resources; and the aggregation of data can mask underlying trends and relationships.

The second approach is to study a more homogeneous subclass of situations. The result is knowledge about this subclass but ignorance about the larger class. The less that is known about the phenomenon being studied, the greater the risk in assuming that findings can be generalized from the subclass to the class.

The third approach is to divide resources over many subcategories or small collectives, attending to each separately. This approach is often advisable, although it does not promise firm and replicable conclusions. The data are comparatively thin. However, variation observed is valid for the local situation and may suggest alternative explanations of the phenomenon.

The approach taken in the present research is the last. A national sample of the size needed to generalize to the universe of public libraries and their constituents was not feasible, given the resources for the study. Nor was it wise, given the pathbreaking nature of the study. Limiting the study to one or a few case studies would have disallowed extending the findings to any other libraries. It was decided to include in the study libraries of varied size and in various parts of the country, and people representing different interest groups inside and outside the libraries. Although, strictly speaking, the current study cannot be generalized beyond the study libraries, the size of the sample and the heterogeneity of the libraries enhance the generalizability of the results.

Heterogeneity of the sample was assured by stratifying the libraries on the basis of geography (region) and size (population served). The categories of region and population served were drawn from the Survey of Public Libraries (LIBGIS III) conducted by the National Center for Education Statistics in 1977/78 (National Center for Education Statistics) and from the Bowker Annual, 1986, respectively.

Libraries serving fewer than 25,000 people were eliminated from the population, since they would not have enough professional staff -- on the average, 1.4 professional staff members (Bowker Annual, 1986) -- for a sufficient response from the two librarian groups. All libraries serving more than 999,999 people were included.

Figure 1, below, displays the estimated categories in each dimension (population served and region), the percent of U.S. public libraries falling into each category, and the percentage of libraries required to represent each population-by-region cell proportionally. The categories and percentages were drawn from National Center for Education Statistics and the Bowker Annual, 1986.

	North Atlantic [32%]	Southeast [13%]	Great Lakes/ Plains [38%]	West/South-west [17%]
25,000-49,999 [19%]	6.1%	2.5%	7.2%	3.2%
50,000-99,999 [19%]	6.1	2.5	7.2	3.2
100,000-249,999 [19%]	6.1	2.5	7.2	3.2
250,000-499,999 [14%]	4.5	1.8	5.3	2.4
500,000-999,999 [19%]	6.1	2.5	7.2	3.2
≥1,000,000 [10%]	3.2	1.3	3.8	1.7

Figure 1. Sampling Matrix

The sampling frame was the American Library Directory 1987/88. A regimen for random sampling of pages and items on a page was applied to the Directory, accepting only items that represented public libraries. The draft of 136 libraries was distributed appropriately in the cells of the matrix. Additional libraries were drawn to allow for replacement needs that never materialized.

1.2 SAMPLE OF INDIVIDUALS

Individuals were sampled in several ways, varying with the constituent group. Early contact with librarians, local officials, and community leaders in Philadelphia and the San Francisco Bay area convinced the principal investigators, first, that people outside the libraries were potentially important in determining what constitutes the concept of effectiveness; and second, that it would be difficult or impossible to capture the attention of the very busy and sometimes not fully interested outsider. Abandoning personal interviews as outside the scope of project resources and too restrictive of the number and dispersion of sites studied, it was determined that the help of the library directors at the selected sites would be asked for (1) identifying individuals inside and outside the library who should receive questionnaires and (2) distributing questionnaires to the external constituents, the local officials, community leaders, and library users. Thus, the local officials, community leaders, library managers, library service staff, trustees, and friends were selected by the library directors, with relatively few restrictions imposed by the study team. (Refer to the Names Questionnaire, Appendix B.) The users were selected by the director or the director's delegate and, by the researchers' directions, were supposed to be selected to represent a variety of adult user types.

The study team sought, as a minimum, useable response from two people in each of seven constituent groups attached to each of 50 libraries, for a total of 700 useable responses. In order to assure 700 valid responses distributed correctly across constituent types, regions, and libraries, the libraries and individuals were substantially oversampled.

2.0 INSTRUMENTATION

Preliminary interviews and three subsequent rounds of pretesting candidate questionnaires indicated that a mail questionnaire could be expected to elicit the responses required by the study. Furthermore, a mail questionnaire would permit a wider dispersion of study sites and a larger number of subjects than would be afforded by the interview mode.

2.1 PRETESTS

The four versions of the survey instruments were pretested several times over a period of 3 weeks in a selection of libraries in the Philadelphia and San Francisco areas and Washington D.C. The questions of most interest in the pretesting stage were the number of discrete indicators a respondent would be able and willing to deal with, the phrasing of the question which would prompt the respondent to discriminate among library indicators, and the wording on each indicator. The major outcomes of the pretests were: the study team learned that preferences among effectiveness indicators could be elicited via questionnaire; the technique of physical sorting of indicators into categories, which was tested as an alternative to a questionnaire, was abandoned in favor of the standard questionnaire technique; the wording of the question about the indicators was cast in its final form; and the list of indictors was reduced to 61.

2.2 QUESTIONNAIRE DESIGN

The survey questionnaires were of three types: the Preference Questionnaire, the Performance Questionnaire, and the Roles Questionnaire. Because of the length of the three instruments, only the librarians were asked to complete all of them.

The Preference Questionnaire was developed from two sources. First, the literature of librarianship was searched to identify a comprehensive list of items that have been associated with public library effectiveness. These included such things as measures of performance, library standards, and other factors associated with public library "success." The search yielded over 200 items.

Second, several rounds of interviews and instrument pretests in the Philadelphia and San Francisco regions yielded additional items.

The exhaustive list was then collapsed, in order to produce a list of manageable length. Essentially redundant items were merged and specific, related items were subsumed under broader items. This yielded a list of 61 discrete items that might be seen as indicators of public library effectiveness. Respondents were asked to indicate, "In describing a public library, how important would it be for you to know each of the following about that library?" (See Appendix E for the complete Preference Questionnaire.)

This questionnaire was sent to every person in the sample.

The Performance Questionnaire comprised the identical list of indicators, but respondents were asked to indicate "...how does your library rate, compared to an 'ideal' public library for this community?". (See Appendix F for the complete Performance Questionnaire.)

This questionnaire was sent only to Library Managers and Library Service Staff.

The Roles Questionnaire, as pointed out above, was developed directly from the eight role statements contained in Planning and Role Setting for Public Libraries [4]. Each statement was condensed to one paragraph (Appendix G). An individual's choice of roles for a given library may reflect either his/her perception of what constitutes the library's current roles (which may not agree with other's perceptions or with management's choices); or his/her preference for the library's roles, regardless of whether they are the library's current roles.

Respondents were asked, "...what is the importance of each role in your library's current program of services?" The time needed to read and reflect on the various statements added to the already considerable time being requested from the respondents; therefore, only the two librarian constituent groups were asked to reply to this part of the survey. Limiting the question to the librarian constituents has probably reduced some of the potential variability in answers for a given library.

In addition, each respondent was asked rather standard personal descriptive questions, including, where appropriate, their title, formal relationship with the library, years of association with the library, sex, age, educational level, and frequency of use of the library. (See Appendix J for the demographic questions.)

3.0 APPLICATION OF INSTRUMENTS

3.1 ENLISTMENT OF COOPERATION

The study objective in this phase was to gain the initial cooperation of 100 libraries, properly distributed by region and size, in order eventually to achieve 50 "fully qualifying" libraries (having 2 responses for each constituent group). A letter was sent to the director of each library in the sample, introducing the purpose and method of the study and enlisting their participation. (See Appendix A, Introductory Letter.) Within 7 to 10 days, each director was called by one of the principal investigators to secure his/her participation. Due to the high rate of acceptance, not all directors who received letters were called. Of the 105 called, 102 (97.1%) agreed to participate. They were roughly correctly distributed on the sampling matrix.

3.2 IDENTIFICATION OF RESPONDENTS

Those directors who had agreed to participate were sent a questionnaire asking them to provide the names, addresses, and phone numbers of people qualifying in each of the constituent groups except users. (See Appendix B, Names Questionnaire.) Of 102 Names Questionnaires, 82.3% were returned completed within the time limit.

Figure 2 shows for each cell the returns of the Names Questionnaire, compared with the number desired (in parentheses) in order to represent the proportion of the total population, shown in Figure 1.

	North Atlantic	Southeast	Great Lakes/ Plains	West/South-west
25,000-49,999	5 (5)	2 (2)	5 (6)	2 (3)
50,000-99,999	4 (5)	2 (2)	6 (6)	4 (3)
100,000-249,000	5 (5)	2 (2)	6 (6)	4 (3)
250,000-499,999	3 (4)	2 (2)	5 (5)	3 (2)
500,000-999,999	4 (5	2 (2)	5 (6)	4 (3)
≥1,000,000	4 (3)	1 (1)	2 (3)	2 (1)

Figure 2. Return of Names Questionnaire, Actual and (Desired)

The response on the Names Questionnaire generally reflects the proportions in the population, with some slight over-representation of the West /Southwest and the ≥1,000,000 categories.

3.3 QUESTIONNAIRE MANAGEMENT AND RESPONSE

Questionnaires were sent first class with a cover letter (Appendix D) to the named individuals at the 84 sites. Figure 3 shows the number in each constituent group.

	Number Sent	Number Returned	Percent Returned
Local Officials	477	387	80.9%
Community Leaders	469	389	82.9
Library Managers (incl. 84 directors)	306	293	95.4
Library Service Staff	318	304	95.6
Trustees	309	260	84.5
Friends of Libraries	306	273	88.9
Users of Libraries	504	512	100.0*
	2689	2418	89.8

Figure 3. Constituent Sample and Response
[*Note that some directors returned more User responses than requested.]

The questionnaires for the Local Officials and Community Leaders were sent to the 84 directors of the libraries, who were asked to distribute those questionnaires, preferably by hand. The directors also received the user questionnaires, along with instructions in how to administer them. (See Appendix C for the instructions to directors.)

Approximately two weeks after the questionnaire mailing, a postcard follow-up (Appendix E) was mailed directly to all who had not replied.

Replacement questionnaires with a new cover letter (Appendix F) were sent 1 month after the first questionnaire mailing to all non-respondents.

When the returns were closed, they totaled 2418, a 89.8% response. The distribution among constituent types is shown in Figure 3, above.

The questionnaires were returned with the following distribution across the cells of the stratifying variables. Percentage of desired return is shown in parentheses.

Population Served	North Atlantic	Southeast	Great Lakes/ Plains	West/South-west	Total
25,000-49,999	6.0% (6.1%)	1.9% (2.5%)	6.0% (7.2%)	2.5% (3.2%)	16.4% (19%)
50,000-99,999	3.8 (6.1)	2.4 (2.5)	7.7 (7.2)	4.4 (3.2)	18.3 (19)
100,000-249,000	6.1 (6.1)	2.5 (2.5)	7.8 (7.2)	5.2 (3.2)	21.6 (19]
250,000-499,999	3.7 (4.5)	2.6 (1.8)	6.0 (5.3)	3.8 (2.4)	16.1 (14)
500,000-999,999	4.6 (6.1)	2.4 (2.5)	6.0 (7.2)	4.6 (3.2)	17.7 (19)
≥1,000,000	4.3 (3.2)	1.2 (1.3)	2.0 (3.8)	2.4 (1.7)	9.9 (10)
Total	28.6 (32)	13.1 (13)	35.4 (38)	22.9 (17)	

Figure 4. Actual and (Desired) Returns

By and large, the desired distribution was achieved. Although the method of sampling disallows generalizing from the sample to the population of American public libraries, the findings do reflect the situation in a range of library sizes in the four major regions of the country.

The principal investigators conclude that the extraordinary rate of return is due to a number of factors:

- Library directors were contacted by telephone by the principal investigators.
- Respondents were selected by library directors, with the possibility that mostly survey-positive respondents were selected.
- Many of the respondents were contacted -- often personally -- by the library directors.
- The topic of effectiveness seems to be salient to the public library community.
- The initial introductory letter (sent to the directors) was strong and positive.
- All letters and envelopes were made to appear individually produced.
- The principal investigators' names are known to many librarian respondents.
- Librarians are prone to cooperate with surveys.
- The study was supported by a federal agency, the Department of Education.

Some people may have responded because of the offer of a copy of the survey results and participation in a raffle for current best sellers.

The strongest argument for seeking a selected sample through the directors is that of expediency: there seemed no more practical way to achieve a national sample within the study resources. There may be other arguments, as well. First, those people selected by the directors, to the extent that they might be advocates for or users of the public library, might be expected to respond with more care or to have given more thought to the essence of a public library than people selected at random. The thrust of this research was to explore the criteria that mark a library's effectiveness, and that may be done best by tapping the views of those most likely to have given thought to the subject.

Second, with the exception of the librarian constituents, the respondents were being asked not to evaluate the library but to judge criteria for evaluating libraries; it does not seem plausible that a positive regard for a particular library or for libraries in general would predispose one toward particular criteria.

FINDINGS

1.0 WHAT ARE THE DIMENSIONS AND INDICATORS OF PUBLIC LIBRARY EFFECTIVENESS?

1.1 WHAT INDICATORS APPEAR IN THE LITERATURE?

Systematic and purposive searches of the library literature identified 45 documents containing items that could be considered indicative of library effectiveness. In order to build as exhaustive a list as possible from which to construct a survey instrument, a set of interviews, as described in the first chapter, were conducted. Literature and interviews together yielded 257 separate indicators of effectiveness. These were classed intuitively by the study principals and are displayed in those classes in Figure 5.

SERVICES ACCESS
access by telephone
accessibility of site
adequate parking
complete range of services offered whenever open
convenience (to users) of hours open
convenience and prominence of location
handicapped accessibility
number of hours open per week
range of hours open
space per capita

INTERNAL ADMINISTRATIVE PROCESSES
adaptability of the organization
adequacy of salaries
annual plan review and adjustment
automation for increased productivity
capability to plan and organize
continuing education for trustees
cooperation with local libraries
cooperative and trusting relationship with state library agency
efficiency/cost effectiveness
evaluation of library programs
flexibility of the organization or ability to change
goals achievement
library activity index or workload level
locally established standards (community or state)
long-range, written plan
management of library resources
managerial competence
member of a formally organized library cooperative
microcomputer for interlibrary loan, communication and resource sharing
on-going training for reference staff
orientation of new board members
participation in plan for automation
participation in state-wide library network
policies
policy covering services and fees
ratio of dollars (size of budget) to service (# of transactions)

recent citizen survey or community analysis
resource sharing
setting appropriate roles to fill
staff training in public relations
system-level planning for library services
use of performance measures for planning purposes
use of user studies
written bylaws for board, reviewed regularly

ADMINISTRATIVE RESOURCES

capital expenditure
expenditures per capita
gifts
income, by source
local funding base
local library funds as a percentage of total library budget
operating expenditure
per capita support
ratio of potential revenue to actual revenue
size of budget, especially as compared to libraries of similar size
stability of funding

COMMUNITY RELATIONSHIPS

amount of activity of Friends group
amount of volunteer activity
brochure available
budget allocation for public relations (that it exists, not the quantity)
building clearly identified from street
collection evaluation based on input from community leaders
community awareness of library services
community services
complaints procedure
contribution by Friends group to the presence of library in the community
contribution of library to community well-being
cooperative activities with other types of libraries and non-library agencies
cooperative arrangements or relationships with outside organizations
defined mechanism for providing community input to design and development
existence of Friends group
fit between library and other service organizations; joint programs
interaction with other agencies--community, libraries, neighboring communities
library productions, publications, and recordings (published output to community)
library publications
library support of other agencies' missions (e.g.. voter reg.)
prestige of librarian in the community
program planning and consultation for community groups
prominence/visibility of the organization in the community
public access to board meetings and inspection of minutes, policies, financial records
public opinion
public relations with community organizations
publicity for public awareness of services
sense of community fostered by library
speeches and presentations given
staff member assigned to public relations
staff members active in community
symbolic use, special events use
variety of media used for public relations

MATERIALS

amount of activity in book selection and acquisitions
availability of materials owned
availability of recent books or materials
books per capita
collection evaluation based on comparison with similar collections
collection quality
collection size or number of volumes held
currency of collection (up-to-dateness)
efficiency of materials (as few volumes as possible to cover basic needs of users)
expenditure for materials
scope and depth of reference resources
materials as a percentage of total expenditures
new volumes per capita
new additions to collection
number of items per capita
number of periodical titles
percentage of holdings intended for juveniles to juvenile percentage of population
periodical titles per capita
probability of book and periodical ownership
re-evaluation of each item in collection
speed of acquisitions
turnover rate
up-to-date, written collection development policy

SERVICE OUTPUT

amount of equipment usage
branch fill rate
browsers' fill rate
building usage or attendance
circulation
circulation per volume
document delivery
document exposure count
document exposure time
duration of visits
effective equipment usage by users
frequency of visits
in-house use
in-library materials use per capita
instruction to users in materials use and equipment operation by staff
interlibrary loan circulation
interlibrary loan fill rate
item-use day
juvenile percentage of circulation to juvenile percentage of materials budget
mean patron success rate
microfilm usage, as an aspect of reference
number of contacts and types of assistance rendered by public service staff
number of items borrowed per visit
number of people using public meeting rooms
number of services used during visit
patterns of reference usage
program attendance per capita
reference transactions
reference transactions per capita
response time
subject and author fill rate
time spent in building

title fill rate
types of materials borrowed
user evaluation
user satisfaction
user satisfaction a specified time period after transaction
user satisfaction immediately after transaction

PHYSICAL PLANT

adequate size of facilities
aesthetic experience of entering the library building
appeal of library interior
energy efficiency
satisfaction with physical facilities
seating capacity
security
space for child and family use with suitable furniture and equipment

BROAD SOCIAL IMPACT

amelioration of patterns of living
better use of leisure by community
comparison of library use to other public service or event usage, e.g.., to sports events
contribution of library to individual well-being
endorsement of intellectual freedom statements, e.g.. bill of rights
importance of library to business community
importance of library to professional workers
improved level of education in community
survival of the organization
use of materials by any user without restrictions on content, format or treatment

SERVICE OFFERING (RANGE) / FIT WITH COMMUNITY

access to statewide database for staff and users
after-hours materials return
availability of audio, video and other non-print materials
availability of current information about community and community services
books-by-mail service
catalog
community outreach
educational, recreational, cultural programs
equipment availability
extended reference services--research, preparation of bibliographies
holdings information in machine-readable form
identification and integration of special needs groups
information on materials availability among branches
innovative programs and practices
instruction in use of equipment
inter-library loan
inventory of library services
literacy programs
merchandising for borrowing
no fees for borrowing or use of materials
personalized service
photocopier availability
public meeting space available
readers' advisory
reserve service
service to homebound and institutionalized
services to groups in community
services to populations with special needs

services, materials and facilities available free-of-charge
staff availability
user education
variety of formats of materials
young adult section

SERVICE QUALITY

amount of information on which problem-solving is based
concern for client
correct responses to reference questions
helpful, courteous staff
information and referral, depth of response to queries
librarian perception of reference fill rate
number of sources from which information is sought for purposes of problem-solving
professional service
quality of problem solving from information provided by referral service
reference assistance, level of service
reference completion rate
speed of document delivery for reserves
speed of moving from the problem to the source of information that will aid in its solution
user perception of reference fill rate

STAFF

active, interested board
articles and reviews in professional publications
competence of librarians
continuing education for staff
creativity of staff
effort made by staff
ethnic diversity of staff
expenditure for personnel
flexibility of staff
librarian assigned to service to disabled
personnel management policies
professional staff size per capita
qualified staff assigned to reference
qualified staff assigned to special needs populations
ratio of available public service staff to users in library
ratio of staff to population
salaries and wages as a percentage of total expenditures
size of staff
staff participation in decision making
staff training
treatment of staff
unionization/labor contracts (lack of or existence of?)
written job descriptions for personnel

INTERNAL TECHNICAL PROCESSES

long-term assessment of space needs
materials processed
ratio of staff to circulation

USER POPULATION/MARKET PENETRATION

adult program attendance per adult capita
annual library visits per capita
circulation per capita
clients registered
descriptions of users, i.e. sex and occupation

effective circulation per user
expanding demands on a service
growth in user contact
juvenile percentage of circulation to juvenile percentage of population
juvenile program attendance per juvenile capita
patron visits per capita
patrons grouped by age and other specific characteristics as % of population
registration as a percentage of population
repeated use of a service by the same individual
total client population
users as a percentage of the population
volumes read per person

Figure 5. Full List of Indicators, Classed

The exhaustive list and its classification were the basis for further collapsing the indicators into a list small enough to be useable in a mailed questionnaire.

1.2 WHICH INDICATORS BEST DISCRIMINATE EFFECTIVE FROM INEFFECTIVE LIBRARIES?

Two questions addressed the usefulness of each indicator for discriminating among libraries. One, asked of every respondent, was "In describing a public library, how important would it be for you to know each of the following about that library?" This wording (1) prompts the respondent to identify in the abstract those items that say most about a library and (2) assumes that making such an identification would be tantamount to indicating items that "discriminate" to varying degrees.

The second question that addressed usefulness was: "For each item, how does your library rate, compared with an 'ideal' public library for this community?" This was asked only of the two librarian populations. Using this wording to address the study question -- which indicators best *discriminate* -- directly tests the ability of each indicator to discriminate among organizations' performances, as judged by organizational participants. The performance questions tells us (1) how well libraries are performing on each indicator; and (2) the extent of variation in performance among the libraries on each indicator.

The preference question, on the other hand, reflects the value that the respondents place on each indicator -- the informativeness of each indicator in describing the effectiveness of libraries.

1.2.1 INDICATORS THROUGH PREFERENCES

In Appendix K the mean scores for each indicator, by constituent group, is displayed. All indicators received ratings that ranged from 1 to 5. The mean rating of all indicators for each constituent group falls between 4.82 and 2.54. The distribution of means has a smooth continuity, with no substantial breaks; thus it is difficult to identify natural clusters of preferences for indicators. Overall, respondents see virtually all of the indicators as having something to say about the effectiveness of a public library. This is to be expected, inasmuch as virtually all of the indicators have been used or proposed for evaluating library services. Exceptions to this are discussed in the following paragraphs.

Considering all respondents together, the indicators that score highest -- that are most often noted as an item one would want to know about in order to describe a library -- are

- Convenience of Hours
- Range of Materials
- Range of Services
- Staff Helpfulness
- Services Suited to Community
- Materials Quality
- Materials Availability
- Awareness of Services
- Convenience of Location

The first six were scored within the top sextile by all constituent groups. The remaining three fell into the top sextile of mean scores for at least four of the constituent groups. Because of the heterogeneity of the groups and the incomparability of their population and sampling parameters, data from the seven constituent groups were not combined. Notwithstanding, the pattern of scores for the nine indicators above identify them as the salient indicators emerging from the study.

Note that the top seven -- those rated high by all constituent groups -- are all focused on the nature and quality of service offerings, not on internal process or resources Three are related to materials; two, to services generally; one, to staff interaction with users; and one, to hours of access. Referring to the intuited classified scheme of Figure 5, above, the seven most highly rated indicators fall into the Service Access, Materials, and Service Quality categories.

The indicators that tend to be rated lowest -- remembering, nonetheless, that their mean rating suggests that the majority of people within each constituency view even these as somewhat useful indicators of effectiveness -- are

Energy Efficiency
Materials Turnover
Library Use Compared with Other Services/Events.

These indicators fall into the lowest sextile of mean scores for all seven constituent groups. Others rated in the lowest sextile by between 4 and 7 constituent groups are:

Variety of Users
Public Involvement in Library
Staff Expenditure

Volume of Reference Questions
Board Activeness
Voluntary Contributions
Library Products.

This group represents a disparate array of indicators which might range across the intuited categories of Internal Administrative Processes, Administrative Resources, Community Relationships, Service Outputs, Physical Plant, Broad Social Impact, Service Offerings/Fit with Community, Staff, or User Population/Market Penetration -- all but one of those not represented by the most preferred indicators.

A final question gave the respondents the opportunity to "Add any items that you consider essential in describing a library's effectiveness." Of the total respondents to the study, 559 (23.1% of the total sample of 2418) suggested at least one additional indicator.

Statements that were essentially redundant with the indicators listed by the invesigators accounted for 70.5% of the 559 responses. In the researchers' estimation, the statements were broader (vis a vis the questionnaire's), were more specific , or paraphrased the indicators (vis a vis the questionnaire's). Regarding the latter category, many responses were clearly written to emphasize one of the 61 indicators important to the respondent. Examples of redundant responses are "Availability to all," a broader statement of questions 5, 13, 21, and 60; "Evening hours for students and working folks," more specific than question 5 on the convenience of hours; and "Availability of new books," a paraphrase of question 28, on the newness of library materials.

Assorted comments on the local library, the questions, the indicators listed in questions 1 through 61, and uninterpretable statements constituted 9.7% of the 559 responses. Indicators not included among the initial 61 number 111, or 19.9% of those answering the open questions and 4.6% of all study respondents. These grouped naturally into three categories. They are shown here with the percentage of those responding to the open questions.

10.9%	Level of community and governmental support (especially financial), and the library's ability to gain that support (e.g.: "Tax support: sources of and willingness of citizens to;" "How effective library is in leveraging money")
5.8%	Degree to which library materials are arranged and signed for self-use by patrons (e.g.: Ease of locating books, articles;" "How long it takes to figure out how to use, are the materials logically and clearly arranged")
2.5%	Noise level of the library (e.g.: "A quiet atmosphere;" "Freedom from excessive noises and /or distractions")
1.6%	Miscellaneous (such as services to a specific group)

The numbers are not overwhelming -- "level of support" was mentioned by only 2.5% of the total study respondents -- but the three classes are substantive and should be considered in replicating or extending the current study.

1.2.1.1 HOW DO PREFERENCES FOR INDICATORS VARY BY SIZE OF LIBRARY?

Analysis of variance was performed to explore the relationship between the indicators preferred and the size of library with which the respondent was associated. Size categories were those defined in Figure 1. Of the 61 indicators, the analysis showed that the level of preference for ten of them was associated with the size of the library. Such a small order of association (10 out of 61) does not support the idea that there is a general pattern of association between size and preference.

Analysis of variance was also performed just using the two highest and two lowest size categories. Again, the number of indicators for which there was significant association was so few that the hypothesis of general association between size and preference had to be rejected.

The analysis of variance also controlled for constituent group, to test the possibility of interaction effect between constituent group and size of library. No pattern of interaction was found.

The analysis of variance also controlled for constituent group, to test the possibility of interaction between constituent group and size of library and their joint effect on preferences. No pattern of interaction was found.

1.2.2 PERFORMANCE RATINGS

Figure 6, Performance Ratings, Ranked, displays the responses to the second main question in the study, "How would you rate your library?" Responses for Library Managers and Library Service Staff are aggregated, and the items are displayed in rank order, using the means for the two groups and displaying the means and standard deviations for each item.

	INDICATOR	MEAN	STANDARD DEVIATION
1.	SUPPORT OF INTELLECTUAL FREEDOM	3.58	.63
2.	FREE-NESS OF SERVICES	3.54	.62
3.	STAFF CONTACT WITH USERS	3.48	.62
4.	STAFF HELPFULNESS	3.41	.65
5.	INTER-LIBRARY COOPERATION	3.40	.71
6.	VARIETY OF USERS	3.36	.69
7.	RANGE OF MATERIALS	3.32	.74
8.	PUBLIC OPINION	3.32	.66
9.	CIRCULATION	3.32	.67
10.	EQUIPMENT USAGE	3.31	.70
11.	REFERENCE FILL RATE	3.31	.64

12.	CONVENIENCE OF LOCATION	3.31	.73
13.	RANGE OF SERVICES	3.29	.70
14.	VOLUME OF REFERENCE QUESTIONS	3.27	.68
15.	NUMBER OF VISITS	3.27	.68
16.	CONVENIENCE OF HOURS	3.27	.72
17.	STAFF QUALITY	3.25	.70
18.	MATERIALS QUALITY	3.24	.67
19.	CONTRIBUTION TO COMMUNITY WELLBEING	3.23	.70
20.	STAFF SUITED TO COMMUNITY	3.22	.66
21.	SERVICES SUITED TO COMMUNITY	3.21	.65
22.	IN-LIBRARY USE OF MATERIALS	3.20	.65
23.	USER SAFETY	3.17	.66
24.	BUILDING EASY TO IDENTIFY	3.15	.83
25.	NEWNESS OF MATERIALS	3.13	.72
26.	NUMBER OF MATERIALS OWNED	3.10	.78
27.	WRITTEN POLICIES, ETC.	3.10	.85
28.	BUILDING APPEAL	3.10	.84
29.	MATERIALS TURNOVER	3.08	.68
30.	MANAGERIAL COMPETENCE	3.07	.76
31.	USERS' EVALUATION	3.06	.77
32.	SPEED OF SERVICE	3.02	.61
33.	HANDICAPPED ACCESS	3.01	.90
34.	SPECIAL GROUP SERVICES	3.01	.78
35.	GOAL ACHIEVEMENT	2.97	.59
36.	RELATIONS WITH COMMUNITY AGENCIES	2.94	.75
37.	FLEXIBILITY OF LIBRARY	2.94	.81
38.	AMOUNT OF PLANNING AND EVALUATION	2.89	.88
39.	INTER-LIBRARY LOAN	2.88	.77
40.	INFO ABOUT OTHER COLLECTIONS	2.88	.79
41.	USERS PER CAPITA	2.85	.79
42.	EFFICIENCY	2.82	.76
43.	BUILDING SUITABILITY	2.79	.86
44.	TOTAL EXPENDITURES	2.78	.89
45.	MATERIALS AVAILABILITY	2.78	.69
46.	LIBRARY USE COMPARED WITH OTHER SERVICES/EVENTS	2.77	.79
47.	PROGRAM ATTENDANCE	2.75	.86
48.	VOLUNTARY CONTRIBUTIONS	2.70	.92
49.	MATERIALS EXPENDITURE	2.69	.88
50.	STAFF CONTINUING EDUCATION	2.69	.95
51.	STAFF MORALE	2.68	.82
52.	PUBLIC RELATIONS	2.67	.89
53.	BOARD ACTIVENESS	2.66	.90
54.	COMMUNITY ANALYSIS	2.62	.12
55.	AWARENESS OF SERVICES	2.61	.75
56.	STAFF SIZE	2.57	.86
57.	STAFF EXPENDITURES	2.54	.91
58.	PARKING	2.44	.03
59.	ENERGY EFFICIENCY	2.41	.88
60.	LIBRARY PRODUCTS	2.37	.96
61.	PUBLIC INVOLVEMENT IN LIBRARY	2.10	.81

Figure 6. Performance Ratings, Ranked

The items at the top of the list are the ones on which libraries in this study tend to see themselves as performing well. The ones at the bottom are the items on which they tend to rate their libraries poor. It is interesting to note that one of the most abstract items, Intellectual Freedom, is one that is consistently rated highest by the librarians in this study. Others in the top ten include Free-ness of Services, two items related to staff-user contact, two items related to use (Circulation and Equipment Usage), two to users (Public Opinion and Variety of Users), one related to materials, and one to relations with other libraries.

Librarians generally saw their institutions succeeding least in four items of community relations (Public Relations, Awareness of Services, Community Analysis, and Public Involvement in Library), two staff items (Staff Size and Staff Expenditure), two areas of perennial concern (Board Activeness and Parking), Energy Efficiency, and Library Products.

1.2.3 COMPARISON OF THE TWO APPROACHES

In order to confirm that respondents saw the "preference" and "performance" questions as essentially different, it is necessary to examine data generated by the two approaches from the same set of respondents, namely, the Library Managers and Library Service Staff.

Library Managers and Library Service Staff were aggregated and their preferences for each indicator (question) correlated with their performance ratings on each indicator, the purpose being to test the extent to which the "preference" question elicited fundamentally the same responses as the "performance " question. Although the scores for many of the indicators were correlated at a significant level, the correlations were trivial. Only one correlation exceeded .2, and the mean correlation was .13 with a standard deviation of .076.

One can conclude with confidence that the question on preference is answered substantially differently from the question on performance.

1.3 WHAT ARE THE DIMENSIONS, OR BROAD AREAS, OF LIBRARY EFFECTIVENESS?

Underlying dimensions or broad area of library effectiveness can be identified by grouping the indicators that receive similar responses. Factor analysis uses the correlations among indicators to so group indicators and, thus, to identify factors, or dimensions, of library effectiveness. Factor analysis can be applied to either the preference or the performance ratings.

1.3.1 DIMENSIONS BASED ON PREFERENCES

Dimensions of the organization-level library effectiveness can be constructed from the response to the question "In describing a public library, how important would it be for you to know each of the following about that library?". The correlations among the individual indicators, based on the ratings that they receive, form the basis for factor analyzing the indicators and grouping them into broad areas of interest (factors, or dimensions) as evidenced by the respondents.

Common factor analysis was used to derive dimensions from the indicators, using the combined responses of all the constituent groups. (Aggregating the responses across constituent groups assumes that the dimensions -- not the preference ratings -- are the same across groups, an assumption justified by an examination of the factor analysis of the individual groups' responses, below.) The number of factors was determined using a variety of criteria. First, the number of factors was set equal to the number of factors with eigenvalues equal to or greater than one; and the results were examined to determine whether orthogonal (varimax) rotation converged on a solution and whether the resulting factors were interpretable. A scree plot of eigenvalues was examined to determine whether the number of factors should be adjusted. Factor analyses with slightly more and fewer factors were attempted and the results examined for convergence, for interpretability, and for the percentage of variance explained.

The result was eight factors, or dimensions, which are reasonably interpretable and which explain 53.6% of the variance. The full factor analysis is shown in Appendix M. The dimensions and their indicators loading at or above .4 follow.

DIMENSION 1: Outputs and Inputs. 16 indicators
- Users per Capita
- Number of Visits
- Volume of Reference Questions
- Circulation
- Variety of Users
- Materials Turnover
- Materials Expenditure
- Total Expenditures
- Program Attendance
- In-library Use of Materials
- Number of Materials Owned
- Staff Size
- Reference Fill Rate
- Staff Expenditure
- Equipment Usage
- Library Use Compared with Other Services/Events

DIMENSION 2: Internal Processes. 9 indicators
- Managerial Competence
- Staff Morale
- Staff Quality
- Efficiency
- Written Policies, etc.
- Goal Achievement
- Staff Helpfulness
- User Safety
- Support of Intellectual Freedom

DIMENSION 3: Community Fit. 11 indicators
- Awareness of Services
- Users' Evaluation
- Contribution to Community Wellbeing
- Services Suited to Community
- Public Opinion
- Flexibility of Library

Relations with Community Agencies
Community Analysis
Staff Suited to Community
Public Relations
Staff Contact with Users

DIMENSION 4: Access to Materials . 5 indicators
Info about Other Collections
Inter-Library Loan
Inter-library Cooperation
Speed of Service
Materials Availability
Free-ness of Services

DIMENSION 5: Physical Facilities. 5 indicators
Building Appeal
Convenience of Location
Building Easy to Identify
Parking
Building Suitability

DIMENSION 6: Management Elements. 7 indicators
Board Activeness
Voluntary Contributions
Library Products
Energy Efficiency
Staff Continuing Education
Amount of Planning and Evaluation
Public Involvement in Library

DIMENSION 7: Service Offerings. 5 indicators
Range of Materials
Range of Services
Convenience of Hours
Materials Quality
Newness of Materials

DIMENSION 8: Service to Special Groups. 2 indicators
Handicapped Access
Special Group Services

FIGURE 7. Preference Dimensions, All Respondents

The least coherent of the dimensions is the sixth, "Management Elements." It contains a number of disparate indicators, three of which will recur in dimensions generated for individual constituent groups, below: Board Activity; Energy Efficiency, and Volunteers.

In addition, the first dimension is less than satisfactory in that it requires two broad descriptors to name it and less focussed than one might wish.

To test the stability of the dimensions, half of the study cases were selected randomly and factor analyzed again, using identical criteria. The resulting factors were identical to those generated using tha full data set.

In Section 2.0 the dimensions for the several constituent groups will be presented and compared; and it will be seen that, compared with the dimensions drawn from the total aggregation of data, above, a sharpening of the dimensions usually occurs; but that frequently many of the indicators comprising dimensions and, thus, the names of the dimensions, remain roughly the same.

1.3.2 DIMENSIONS BASED ON PERFORMANCE

Only the two librarian groups were asked to evaluate the performance of their respective libraries. The evaluations of the two groups were rank ordered by mean scores and Spearman correlation coefficient calculated. The coefficient was .95, significant at the .000 level -- a strong and significant correlation, indicating that the Library Managers and the Library Service Staff are strongly inclined to evaluate their libraries in the same way, justifying the aggregation of their responses.

Factor analysis of library performance ratings, using the same criteria as above, generated 13 dimensions, or factors. The dimensions and indicators produced by the "performance" question are displayed in Figure 8 "Performance Dimensions, All Librarian Respondents."

DIMENSION 1: Usage and Community Impact
- Users per Capita
- Library Use Compared with Other Services/Events
- Number of Visits
- Circulation
- Materials Turnover
- Awareness of Services
- Program Attendance
- Services Suited to Community

DIMENSION 2: Materials
- Newness of Materials
- Materials Availability
- Materials Quality
- Range of Materials
- Number of Materials Owned
- Range of Services

DIMENSION 3: Staff
- Staff Helpfulness
- Staff Suited to Community
- Staff Quality
- Staff Contact with Users
- Speed of Service

DIMENSION 4: Management Quality
- Amount of Planning and Evaluation
- Written Policies, etc.
- Managerial Competence
- Goal Achievement
- Flexibility of Library

Staff Continuing Education
Staff Morale
Efficiency

DIMENSION 5: Expenditures
Staff Size
Staff Expenditure
Total Expenditures
Materials Expenditure

DIMENSION 6: Building
Energy Efficiency
Building Suitability
Building Appeal
Handicapped Access
User Safety
Building Easy to Identify

DIMENSION 7: In-Library Services
Volume of Reference Questions
Reference Fill Rate
In-Library Use of Materials
Variety of Users

DIMENSION 8: Community Fit
Free-ness of Services
Public Relations
Relations with Community Agencies
Contribution to Community Wellbeing
Public Opinion

DIMENSION 9: Public Involvement

Voluntary Contributions
Board Activeness
Public Involvement in Library

DIMENSION 10: Building Access
Convenience of Hours
Parking
Convenience of Location

DIMENSION 11: Larger Materials Issues
Support of Intellectual Freedom
Inter-Library Cooperation
Info about Other Collections
Special Group Services

DIMENSION 12: User Reaction
Community Analysis
Users' Evaluation
Library Products

DIMENSION 13: Miscellaneous
Inter-Library Loan
Equipment Usage

Figure 8. Performance Dimensions, All Librarian Respondents

1.3.3 COMPARISON OF DIMENSIONS USING THE TWO APPROACHES

Comparison of the factor analysis of responses to the two questions reveals that, overall, the "performance" dimensions reflect the dimensions generated through the more abstract "preference" question, "What would you want to know..." asked of all respondents. However, as the number of dimensions demonstrates, the "performance" dimensions are more specific.

Perhaps the best example is the first dimension generated by each type of question. The first dimension from the "preference" question is labelled Outputs and Inputs; it consists of 16 relatively disparate indicators of services, services consumption, expenditure, and organizational resources. The first dimension generated by the "performance" question is essentially a subset of the first "preference" dimension, but is considerably tighter. It comprises only eight indicators related to users, use of services, and the relation of services to the community. Moreover, the fifth "performance" dimension, Expenditures, is a subset of the first "preference" dimension, Outputs and Inputs.

As another example of the relationships among the data from the two types of questions, the eighth "performance" dimension and the third "preference" dimension merit the same label -- Community Fit. However, while there is considerable overlap among the indicators in the two dimensions, the two sets of indicators are not identical.

An example of tightening that occurs with the "performance" approach can by found in the ninth "performance" dimension. The indicators Voluntary Contributions, Board Activeness, and Public Involvement in Library, which are commonly found in confusing combination with other indicators, cluster in this dimension and are easily labelled.

2.0 HOW DO THESE DIMENSIONS AND INDICATORS VARY ACROSS CONSTITUENT GROUPS?

2.1 INDICATORS

Figure 9, Indicators Ranked, by Constituent , Annotated, displays the rankings of indicators by mean scores, by constituent group. The 61 ranked indicators were divided into sextiles. Indicators were compared within the sextiles to see the degree of commonality of choice, constituent to constituent.

1. Of the 61 indicators, 40 were rated in the same sextile by 4 or more of the constituent groups. That is, 66% of the indicators were valued at about the same level of importance by more than half of the constituent groups. These are shown in bold in Figure 9.

	COMMUNITY LEADERS	LOCAL OFFICIALS	FRIENDS	TRUSTEES	USERS	MANAGERS	SERVICE LIBNS
1st Sextile	**HOURS***	**HOURS***	**HOURS***	**HOURS***	**HOURS***	**HOURS***	**STAF HELP***
	RANGE MATS*	**RANGE MATS***	**RANGE MATS***	**STAF HELP***	**RANGE MATS***	**STAF HELP***	**RANGE SVC***
	RANGE SVC*	**SVCS SUITED***	**STAF HELP***	**SVCS SUITED***	**RANGE SVC***	**RANGE MATS***	**RANGE MATS***
	STAF HELP*	**RANGE SVC***	**RANGE SVC***	**RANGE MATS***	**STAF HELP***	**SVCS SUITED ***	**HOURS***
	SVCS SUITED*	**STAF HELP***	**SVCS SUITED***	**RANGE SVC***	**MATS QUAL***	**RANGE SVC***	**SVCS SUITED ***
	MATS QUAL*	**MATS AVAIL**	**LOCATION**	PUB OPINION	**LOCATION**	CIRC MATS	CIRC MATS
	MATS AVAIL	**LOCATION**	**MATS QUAL***	MGR COMPETENCE	**MATS AVAIL**	PUB OPINION	**MATS QUAL***
	AWARENESS	**MATS QUAL***	WELLBEING	STAF MORALE	FREE	**MATS QUAL***	STAF MORALE
	LOCATION	**AWARENESS**	**AWARENESS**	**MATS QUAL***	**SVCS SUITED***	NO. VISITS	AWARENESS
	FREE	USER EVAL	**MATS AVAIL**	STAF QUAL	NEW MATS	**AWARENESS**	STAF QUAL
2d Sextile	**WELLBEING**	**WELLBEING**	FREE	USER EVAL	PARKING	LOCATION	**PUB OPINION**
	USER EVAL	**PUB OPINION**	**STAF QUAL**	AWARENESS	**SVC SPEED**	**STAF QUAL**	NO. VISITS
	SVC SPEED	NO. VISITS	EASY TO ID	**WELLBEING**	COOP W LIBS	USER EVAL	LOCATION
	STAF QUAL	**MGR COMPETENCE**	**PUB OPINION**	NO. VISITS	**HANDICAPPED**	USERS % OF POPN	USER EVAL
	PUB OPINION	**SVC SPEED**	SPECIAL GROUPS	LOCATION	AWARENESS	MATS AVAIL	MATS EXPEND
	HANDICAPPED	**HANDICAPPED**	STAF MORALE	CIRC MATS	**STAF QUAL**	MATS EXPEND	**MGR COMPETENCE**
	PARKING	FREE	**MGR COMPETENCE**	GOALS	SPECIAL GROUPS	STAF MORALE	USERS % OF POPN
	MGR COMPETENCE	**STAF QUAL**	**HANDICAPPED**	FLEXIBLE ORG	INTELL FREEDOM	**SVC SPEED**	MATS AVAIL
	NEW MATS	CIRC MATS	INTELL FREEDOM	USERS % OF POPN	BLDG SUITED	EASY TO ID	MATS OWNED
	FLEXIBLE ORG	SPECIAL GROUPS	**SVC SPEED**	MATS AVAIL	STAF MORALE	REF FILL RATE	**WELLBEING**
3d Sextile	NO. VISITS	**EASY TO ID**	NEW MATS	SPECIAL GROUPS	**EASY TO ID**	WELLBEING	REF FILL RATE
	BLDG SUITED	PARKING	**FLEXIBLE ORG**	SVC SPEED	**FLEXIBLE ORG**	EXPENDITURES	**INTELL FREEDOM**
	STAF SUITED	**FLEXIBLE ORG**	PARKING	**INTELL FREEDOM**	**STAF SUITED**	MGR COMPETENCE	**STAF CONTACT**
	EASY TO ID	NEW MATS	COOP W LIBS	FREE	WELLBEING	**FLEXIBLE ORG**	**EASY TO ID**
	SPECIAL GROUPS	GOALS	BLDG SUITED	PLANNING	MGR COMPETENCE	NEW MATS	**FLEXIBLE ORG**
	INTELL FREEDOM	**STAF SUITED**	USER EVAL	**EASY TO ID**	**STAF CONTACT**	**STAF CONTACT**	STAF SIZE
	COOP w LIBS	STAF MORALE	**STAF SUITED**	MATS EXPEND	USER EVAL	**INTELL FREEDOM**	SPECIAL GROUPS
	STAF MORALE	BLDG SUITED	NO. VISITS	**STAF SUITED**	SAFETY	MATS OWNED	EXPENDITURES
	CIRC MATS	COOP W LIBS	**STAF CONTACT**	HANDICAPPED	BLDG APPEAL	FREE	SVC SPEED
	STAF CONTACT	EXPENDITURES	GOALS	EXPENDITURES	OTHER COLLECTNS	**STAF SUITED**	POLICIES
4th Sextile	USERS % OF POPN	USERS % OF POPN	CIRC MATS	**EFFIC LIB OPNS***	**EFFIC LIB OPNS***	**GOALS**	HANDICAPPED
	GOALS	PROGRAMS	BLDG APPEAL	STAF CONTACT	LIB PRODUCTS	STAF SIZE	FREE
	BLDG APPEAL	**MATS OWNED**	**EFFIC LIB OPNS***	POLICIES	ILL	SPECIAL GROUPS	**GOALS**
	MATS OWNED	INTELL FREEDOM	SAFETY	BLDG SUITED	**MATS OWNED**	BLDG SUITED	NEW MATS
	PROGRAMS	**EFFIC LIB OPNS***	PUBL RELTNS	STAF EXPEND	REF FILL RATE	POLICIES	COOP W LIBS

Figure 9. Indicators, Ranked by Constituent Group, Annotated

	COMMUNITY LEADERS	LOCAL OFFICIALS	FRIENDS	TRUSTEES	USERS	MANAGERS	SERVICE LIBNS
	EXPENDITURES	STAF CONTACT	USERS % OF POPN	COOP W LIBS	**GOALS**	**EFFIC LIB OPNS***	**EFFIC LIB OPNS***
	EFFIC LIB OPNS*	**PLANNING**	**PLANNING**	PUBL RELTNS	PUB OPINION	NO. REF QUESTNS	STAF SUITED
	REF FILL RATE	LIB PRODUCTS	**MATS OWNED**	**MATS OWNED**	MATS EXPEND	PARKING	PUBL RELTNS
	PLANNING	BLDG APPEAL	OTHER COLLECTNS	PARKING	STAF CONTIN ED	HANDICAPPED	**PLANNING**
	REL COMM AG	MATS EXPEND	MATS EXPEND	NEW MATS	**PLANNING**	**PLANNING**	BLDG SUITED
5th Sextile	LIB PRODUCTS	SAFETY	BOARD ACTIVITY	**STAF CONTIN ED**	PUBL INVOLVED	VARIETY USERS	NO. REF QUESTNS
	MATS EXPEND	REF FILL RATE	VOLUNTRS	SAFETY	**IN LIB USE***	PUBL RELTNS	STAF EXPEND
	OTHER COLLECTNS	**COMMUN ANALY**	**REL COMM AG**	STAF SIZE	**REL COMM AG**	**IN LIB USE***	VARIETY USERS
	IN LIB USE*	**IN LIB USE***	**PROGRAMS**	REF FILL RATE	**EQUIPUSE**	BLDG APPEAL	**PROGRAMS**
	COMMUN ANALY	VOLUNTRS	**EQUIPUSE**	**PROGRAMS**	CIRC MATS	STAF EXPEND	PARKING
	PUBL RELTNS	**REL COMM AG**	EXPENDITURES	**COMMUN ANALY**	PUBL RELTNS	**PROGRAMS**	**STAF CONTIN ED**
	EQUIPMENT USE	ILL	ILL	**EQUIPUSE**	STAF SIZE	COOP W LIBS	BLDG APPEAL
	ILL	**EQUIPUSE**	REF FILL RATE	BLDG APPEAL	NO. VISITS	**REL COMM AG**	**REL COMM AG**
	VOLUNTEERS	PUBL INVOLVED	**IN LIB USE***	**IN LIB USE***	EXPENDITURES	**STAF CONTIN ED**	**IN LIB USE***
	SAFETY	OTHER COLLECTNS	**STAF CONTIN ED**	VARIETY USERS	POLICIES	**COMMUN ANALY**	BOARD ACTIVITY
6th Sextile	STAF CONTIN ED	STAF SIZE	STAF SIZE	**BOARD ACTIVITY**	VOLUNTRS	**TURNOVER***	ILL
	STAF SIZE	PUBL RELTNS	**PUBL INVOLVED**	REL COMM AG	**STAF EXPEND**	**BOARD ACTIVITY**	EQUIPUSE
	VARIETY USERS	**STAF EXPEND**	**STAF EXPEND**	**VOLUNTRS**	**BOARD ACTIVITY**	ILL	SAFETY
	PUBL INVOLVED	**VARIETY USERS**	**LIB PRODUCTS**	ILL	USERS % OF POPN	EQUIPUSE	COMMUN ANALY
	STAF EXPEND	STAF CONTIN ED	**VARIETY USERS**	OTHER COLLECTNS	COMMUN ANALY	SAFETY	OTHER COLLECTNS
	NO.REF QUESTNS	**BOARD ACTIVITY**	COMMUN ANALY	**LIB PRODUCTS**	**VARIETY USERS**	**PUBL INVOLVED**	**TURNOVER***
	LIBUSE:OTHSVCS*	**NO. REF QUESTNS**	POLICIES	**NO. REF QUESTNS**	PROGRAMS	OTHER COLLECTNS	**LIB PRODUCTS**
	BOARD ACTIVITY	**LIBUSE:OTHSVCS***	**NO. REF QUESTNS**	**PUBL INVOLVED**	**NO. REF QUESTNS**	VOLUNTRS	**PUBL INVOLVED**
	POLICIES	POLICIES	**LIBUSE:OTHSVCS***	**LIBUSE:OTHSVCS***	**LIBUSE:OTHSVCS***	**LIBUSE:OTHSVCS***	VOLUNTRS
	TURNOVER *	**TURNOVER***	**TURNOVER***	**TURNOVER***	**ENERGY EFFIC***	**LIB PRODUCTS**	**LIBUSE:OTHSVCS***
	ENERGY EFFIC *	**ENERGY EFFIC***	**ENERGY EFFIC***	**ENERGY EFFIC***	**TURNOVER***	**ENERGY EFFIC***	**ENERGY EFFIC***

Figure 9. Indicators, Ranked by Constituent Group, Annotated (continued)

Note: Bold indictors are ranked in the same sextile by 4 or more constituent groups.
Bold and asterisked (*) indicators are ranked in the same sextile by all 7 groups.

KEY TO INDICATORS, BY ALPHABETICAL CODE

Ques. #	Alpha Code	Standard Shorthand
19	AWARENESS	AWARENESS OF SERVICES
22	BLDG APPEAL	BUILDING APPEAL
29	BLDG SUITED	BUILDING SUITABILITY
4	BOARD ACTIVITY	BOARD ACTIVENESS
3	CIRC MATS	CIRCULATION
18	COMMUN ANALY	COMMUNITY ANALYSIS
20	COOP W LIBS	INTER-LIBRARY COOPERATION
1	EASY TO ID	BUILDING EASY TO IDENTIFY
30	EFFIC LIB OPNS	EFFICIENCY
2	ENERGY EFFIC	ENERGY EFFICIENCY
35	EQUIPMENT USE	EQUIPMENT USAGE
6	EXPENDITURES	TOTAL EXPENDITURES
36	FLEXIBLE ORG	FLEXIBILITY OF LIBRARY
38	FREE	FREE-NESS OF SERVICES
56	GOALS	GOAL ACHIEVEMENT
13	HANDICAPPED	HANDICAPPED ACCESS
5	HOURS	CONVENIENCE OF HOURS
43	ILL	INTER-LIBRARY LOAN
32	IN LIB USE	IN-LIBRARY USE OF MATERIALS
52	INTELL FREEDOM	SUPPORT OF INTELLECTUAL FREEDOM
17	LIB PRODUCTS	LIBRARY PRODUCTS
40	LIBUSE:OTHSVCS	LIBRARY USE COMPARED w/ OTHER SERVICES/EVENTS
21	LOCATION	CONVENIENCE OF LOCATION
26	MATS AVAIL	MATERIALS AVAILABILITY
46	MATS EXPEND	MATERIALS EXPENDITURE
53	MATS OWNED	NUMBER OF MATERIALS OWNED
59	MATS QUAL	MATERIALS QUALITY
50	MGR COMPETENCE	MANAGERIAL COMPETENCE
28	NEW MATS	NEWNESS OF MATERIALS
15	NO. VISITS	NUMBER OF VISITS
51	NO.REF QUESTNS	VOLUME OF REFERENCE QUESTIONS
48	OTHER COLLECTNS	INFO ABOUT OTHER COLLECTIONS
58	PARKING	PARKING
14	PLANNING	AMOUNT OF PLANNING AND EVALUATION
41	POLICIES	WRITTEN POLICIES, ETC.
7	PROGRAMS	PROGRAM ATTENDANCE
42	PUB OPINION	PUBLIC OPINION
31	PUBL INVOLVED	PUBLIC INVOLVEMENT IN LIBRARY
37	PUBL RELTNS	PUBLIC RELATIONS
9	RANGE MATS	RANGE OF MATERIALS
45	RANGE SVC	RANGE OF SERVICES
10	REF FILL RATE	REFERENCE FILL RATE
23	REL COMM AGEN	RELATIONS WITH COMMUNITY AGENCIES
55	SAFETY	USER SAFETY
60	SPECIAL GROUPS	SPECIAL GROUP SERVICES
25	STAF CONTACT	STAFF CONTACT WITH USERS
11	STAF CONTIN ED	STAFF CONTINUING EDUCATION
34	STAF EXPEND	STAFF EXPENDITURES
44	STAF HELP	STAFF HELPFULNESS
61	STAF MORALE	STAFF MORALE
54	STAF QUAL	STAFF QUALITY
39	STAF SIZE	STAFF SIZE
27	STAF SUITED	STAFF SUITED TO COMMUNITY
49	SVC SPEED	SPEED OF SERVICE
16	SVCS SUITED	SERVICES SUITED TO COMMUNITY
57	TURNOVER	MATERIALS TURNOVER
24	USER EVAL	USERS' EVALUATION
47	USERS%OF POPN	USERS PER CAPITA
33	VARIETY USERS	VARIETY OF USERS
12	VOLUNTEERS	VOLUNTARY CONTRIBUTIONS
8	WELLBEING	CONTRIBUTION TO COMMUNITY WELLBEING

KEY TO INDICATORS, BY QUESTION NUMBER

Ques. #	Alpha Code	Standard Shorthand
1	EASY TO ID	BUILDING EASY TO IDENTIFY
2	ENERGY EFFIC	ENERGY EFFICIENCY
3	CIRC MATS	CIRCULATION
4	BOARD ACTIVITY	BOARD ACTIVENESS
5	HOURS	CONVENIENCE OF HOURS
6	EXPENDITURES	TOTAL EXPENDITURES
7	PROGRAMS	PROGRAM ATTENDANCE
8	WELLBEING	CONTRIBUTION TO COMMUNITY WELLBEING
9	RANGE MATS	RANGE OF MATERIALS
10	REF FILL RATE	REFERENCE FILL RATE
11	STAF CONTIN ED	STAFF CONTINUING EDUCATION
12	VOLUNTEERS	VOLUNTARY CONTRIBUTIONS
13	HANDICAPPED	HANDICAPPED ACCESS
14	PLANNING	AMOUNT OF PLANNING AND EVALUATION
15	NO. VISITS	NUMBER OF VISITS
16	SVCS SUITED	SERVICES SUITED TO COMMUNITY
17	LIB PRODUCTS	LIBRARY PRODUCTS
18	COMMUN ANALY	COMMUNITY ANALYSIS
19	AWARENESS	AWARENESS OF SERVICES
20	COOP W LIBS	INTER-LIBRARY COOPERATION
21	LOCATION	CONVENIENCE OF LOCATION
22	BLDG APPEAL	BUILDING APPEAL
23	REL COMM AGEN	RELATIONS WITH COMMUNITY AGENCIES
24	USER EVAL	USERS' EVALUATION
25	STAF CONTACT	STAFF CONTACT WITH USERS
26	MATS AVAIL	MATERIALS AVAILABILITY
27	STAF SUITED	STAFF SUITED TO COMMUNITY
28	NEW MATS	NEWNESS OF MATERIALS
29	BLDG SUITED	BUILDING SUITABILITY
30	EFFIC LIB OPNS	EFFICIENCY
31	PUBL INVOLVED	PUBLIC INVOLVEMENT IN LIBRARY
32	IN LIB USE	IN-LIBRARY USE OF MATERIALS
33	VARIETY USERS	VARIETY OF USERS
34	STAF EXPEND	STAFF EXPENDITURES
35	EQUIPMENT USE	EQUIPMENT USAGE
36	FLEXIBLE ORG	FLEXIBILITY OF LIBRARY
37	PUBL RELTNS	PUBLIC RELATIONS
38	FREE	FREE-NESS OF SERVICES
39	STAF SIZE	STAFF SIZE
40	LIBUSE:OTHSVCS	LIBRARY USE COMPARED w/ OTHER SERVICES/EVENTS
41	POLICIES	WRITTEN POLICIES, ETC.
42	PUB OPINION	PUBLIC OPINION
43	ILL	INTER-LIBRARY LOAN
44	STAF HELP	STAFF HELPFULNESS
45	RANGE SVC	RANGE OF SERVICES
46	MATS EXPEND	MATERIALS EXPENDITURE
47	USERS%OF POPN	USERS PER CAPITA
48	OTHER COLLECTNS	INFO ABOUT OTHER COLLECTIONS
49	SVC SPEED	SPEED OF SERVICE
50	MGR COMPETENCE	MANAGERIAL COMPETENCE
51	NO.REF QUESTNS	VOLUME OF REFERENCE QUESTIONS
52	INTELL FREEDOM	SUPPORT OF INTELLECTUAL FREEDOM
53	MATS OWNED	NUMBER OF MATERIALS OWNED
54	STAF QUAL	STAFF QUALITY
55	SAFETY	USER SAFETY
56	GOALS	GOAL ACHIEVEMENT
57	TURNOVER	MATERIALS TURNOVER
58	PARKING	PARKING
59	MATS QUAL	MATERIALS QUALITY
60	SPECIAL GROUPS	SPECIAL GROUP SERVICES
61	STAF MORALE	STAFF MORALE

2. Six indicators appear in the top ten ratings of all seven constituent groups. They are asterisked.
3. Eight indicators in the lowest sextile are shared by 4 or more constituent groups (bold), again reinforcing the similarity of responses, group to group.

A main hypothesis for the study was that there would be a significant relationship between the rating of indicators and the constituent type of the respondent. It was anticipated that there would be substantial differences especially among the external constituents (local officials and community leaders) and the internal constituents (the 2 librarian classes). Simple scanning of the ranked mean scores indicates that the groups are more similar than dissimilar.

In addition to analysis in sextiles, the Spearman Rho correlation coefficient was calculated on the indicators preferred by each constituent group, as rank-ordered by the mean scores. The correlations between the pairs of constituent groups are all significant at the .000 level, ranging from a low of .57 to a high of .97. (Refer to Figure 10, below.) Only three of the correlations fall below .7. Interestingly, they are the correlations between Users and Trustees, Users and Library Service Staff, and Users and Library Managers. Prior to the study it was anticipated that the greatest differences in indicator preferences would occur between the constituents external to the library (Community Leaders and Local Officials) and those internal to the library (Library Managers and Library Service Staff) and that there would be a lesser difference between boundary-spanning constituents (Trustees, Friends, and Users) and all other constituent groups. However, the lowest correlations are those between one boundary-spanning group and the internals, and the between that same boundary-spanning group and another. The User group appears in their choice of indicators to be most distinct from the other constituent groups; but even they correlate with the others at a reasonable level.

	Community Leaders	Local Officials	Trustees	Friends	Users	Library Service Staff
Local Officials		.9745				
Trustees	.8399	.8716				
Friends	.9400	.9188	.8497			
Users	.8579	.7974	.6485	.8836		
Lib. Svc Staf	.7715	.7914	.9133	.7565	.5806	
Lib.Mgrs	.8017	.8185	.8964	.7540	.5747	.9678

Figure 10. Correlations of Indicator Choices Among Constituent Groups

2.2 DIMENSIONS

Common factor analysis, with varimax rotation, was used to derive dimensions from the indicator preferences for each of the constituent groups separately. The same criteria described above were used to determine the number of factors and to choose the final factor solutions. These solutions were then compared across constituent groups.

The results from the different constituent groups can be combined into a single factor analysis if it is reasonable to assume that the underlying dimensions of effectiveness are similar across groups. Groups may have different preferences among the indicators and dimensions; but if they tend to group together the same indicators, then the underlying dimensions are roughly the same. No statistical test is available to test for similarity of factor solutions. And because factor analysis is highly dependent on the data set on which it is based, some variation across groups is to be expected. Ultimately the decision about the stability of the factor solution is subjective.

Examination of the factor solutions for different constituent groups led to the conclusion that the groups' responses formed patterns that were more similar than dissimilar. Thus all constituents were aggregated and a single solution was sought, as reported above in 1.3.1.

3.0 HOW DO THESE DIMENSIONS AND INDICATORS VARY ACROSS ORGANIZATION DOMAINS, OR LIBRARY ROLES?

3.1 WHAT ARE THE ROLES THAT PUBLIC LIBRARIES ARE CURRENTLY SEEKING TO FULFILL?

Library managers and library service staff were asked to indicate for eight stated public library roles the "importance of each role in your library's current program of services," from 0 (unimportant) to 3 (important). The rank order of their importance is shown in Figure 11, Role Rank, All Librarians.

Role (Number on questionnaire)	n	mean	s.d.	% of "3"s
Reference Library (#7)	583	2.80	.47	86.4
Popular Materials Center (#5)	585	2.77	.50	80.2
Preschoolers' Door to Learning (#6)	583	2.73	.54	80.2
Community Information Center (#2)	580	2.73	.54	77.0
Formal Education Support Center (#3)	585	2.03	.89	35.7
Community Activities Center (#1)	580	1.97	.93	34.9
Independent Learning Center (#4)	581	1.86	1.00	33.6
Research Center (#8)	581	1.45	.99	17.2
Other (#9)	69	NA	NA	NA

Figure 11. Roles, Ranked, All Librarians.

Respondents were also given the chance to add roles that were important to their library, but not included in the eight listed. Of the 553 librarian responses, 49 (8.9%) contained an added role statement (not a comment or remark). Of these, 16 (2.9%) were substantially different from the eight offered in the questionnaire. They were as follows:

Local history center	6 respondents
After-school place for children and young people	4
Library as a community symbol	2
Preservation of materials	2
Haven, place of retreat	1
Defender of intellectual freedom	1

Figure 12. Additional Roles from the Librarians

At the outset of the study, it was conjectured that the roles of Popular Materials Center and Reference Library would be the most frequent choices, their place as the most universal public library roles; and that Research Center should be chosen least frequently, being the role most often beyond the capacity of a given library. The data support the conjectures, since the cited roles have the two highest and the lowest scores, respectively.

Considering the progression of means and the percentage of "3"s (very important) in the table, natural groupings appear in terms of the inclination of the librarians to identify certain roles as more important than others in their libraries. The first four (Popular Materials Center, Reference Library, Community Information Center, and Preschoolers' Door to Learning) are substantially favored over the others. Based on Figure 11, the four roles might represent the "service core" for American public libraries. At the other extreme, Research Center, rated Important by 17.2% of the respondents and with a mean of 1.45 (closer to Unimportant than to any other point on the scale), seems to represent a "special choice" by library organizations.

3.1.1. CAN NATURAL GROUPS OF ROLES BE IDENTIFIED?

Common factor analysis employing orthogonal rotation was performed on the roles data. The number of factors was determined by the number of eigenvalues greater than 1.0. Two factors were generated, comprising all eight role choices and explaining 45.7 of the variance. The full factor analysis can be found in Appendix O.

FACTOR 1

Community Activities Center
Community Information Center
Research Center
Preschooler's Door to Learning

FACTOR 2

Popular Materials Center
Reference Library
Formal Education Support Center
Independent Learning Center

Figure 13. Role Factors, All Librarians

The factor analysis suggests two groups of roles that tend to be highly correlated, internally. Factor 2 encompasses roles with a longer public library tradition. Factor 1 encompasses roles that are newer, relatively more progressive, or (especially in the case of Research Center) require special library resources.

An examination of the role ratings revealed large differences among the librarians within each library. This implies either a lack of consensus on the roles among the librarians working in that library; or a lack of consistency in how respondents interpreted the question and/or the role statements as presented in the questionnaire. The researchers' experience with libraries attempting to choose role statements for their libraries has been that, in libraries where roles have not been explicitly addressed in a formal planning process, there is often a wide divergence of opinion as to the roles that a library is pursuing. It is plausible, therefore, that there is actual lack of consensus on roles within libraries; but problems with the survey instrument (truncation of the role statements) or with the roles (their description or their classification of the public library mission) cannot be ruled out.

As anticipated, factor scores for the 2 roles factors vary widely within libraries, suggesting wide divergence of opinion among library personnel as to the roles its library is pursuing, or variable interpretation of the scale for answering the question, or insufficient definition in the role statements.

The amount of variation precludes developing a single role score for each library, for it would be inclined to seek the mean in all cases. Therefore, in analyses of roles, the answers of the Library Director alone have been used to represent the role preferences for that library.

3.2 HOW DO INDICATOR PREFERENCES AND PERFORMANCE RATINGS VARY WITH ROLES?

If libraries with different role choices (domains) are actually operating in different domains, then one might expect differences in (1) the indicators that people use to evaluate library performance and/or (2) librarians' ratings of their libraries' performance on the indicators.

3.2.1 INDICATOR PREFERENCES AND ROLES

This study tested whether those indicators considered important varied depending on a respondents' role choices for his or her library. Given the variability of role choices within libraries, only library directors' responses were used.

Seventy-one library directors responded with complete data on roles. Cluster analysis was used to cluster the libraries based on their directors' ratings of the importance of each role. Cluster analysis is extremely sensitive to outliers, so one outlying case was discarded, leaving 70. Cluster analysis is as much an art as a science, with no clear criteria for the choice of clustering method or the number of clusters (Hair, Anderson,and Tatham, 1987). Several different approaches were tried, with the solution chosen that gave the most interpretable results in terms of role ratings.

It is difficult to compare the clusters on eight different role ratings simultaneously, so two different sets of role indexes were created:

1. For each director, two role indexes were created based on the two role factors, or sets of roles, derived from the factor analysis of role responses for all respondents (section 3.1.1). The director's ratings of each role comprising the factor were summed.

2. A second factor analysis was performed using only directors' responses. This resulted in four factors or sets of roles that are subsets of the original two. The full factor analysis is displayed in Appendix P.

FACTOR 1
Community Activities Center
Community Information Center
Research Center

FACTOR 2
Preschoolers' Door to Learning
Reference Library

FACTOR 3
Formal Education Support Center

FACTOR 4
Independent Learning Center
Popular Materials Center

Figure 14. Role Factors, Directors

Four indexes were created for each library. The director's ratings on each of the roles included in each factor were summed and divided by the maximum possible value for each factor, resulting in an index for each role cluster that could take on a value between zero and 1.0. This normalization was necessary because, unlike the two-factor role indexes, above, in the four- factor solution the different factors consist of differing numbers of roles.

The various approaches to clustering the libraries proved more interpretable using the second set of indexes based on the four-factor solution. The approach that resulted in the most interpretable clusters was the average-linkage-between-groups method resulting in three clusters. Figure 15 profiles the clusters that resulted.

Role 1: Community Activities Center; Community Information Center; Research Center.

Role 2: Preschoolers' Door to Learning; Reference Library

Role 3: Formal Education Support Center

Role 4: Independent Learning Center; Popular Materials Center

CLUSTER	Role 1	Role 2	Role 3	Role 4
1	.79	.98	.70	.85
2	.38	.92	.47	.85
3	.39	.88	.73	.68

Figure 15. Mean Scores on Role Indexes by Library Cluster

The first cluster can be characterized as relatively high on each set of roles. The second cluster is low on the first set of roles, moderate on the third, and high on the second and fourth. The third cluster is low on the first set, high on the second and third, and moderate on the last.

A series of analyses of variance were run to compare indicator preferences across clusters. Of the 61 ANOVAs, only three showed significant differences at the .05 level, a number that could occur simply by chance, so the proposition that the clusters differ on preference ratings is rejected. In other words, the groups of library directors formed on the basis of their role choices did not differ significantly on how they rated the importance of the indicators.

3.2.2 PERFORMANCE RATINGS AND ROLES

Libraries operating in different domains may be expected to perform differently on at least some of the indicators. Presumably, libraries placing a priority on one set of roles will, to some extent, offer different services and levels of service than libraries emphasizing a different set of roles.

The same clusters of library directors described in Figure 14 were compared on their performance ratings of their libraries. Of the 61 ANOVAs performed, 30 showed significant differences, indicating that role choices do make a difference in perceived library performance. Figure 16 lists the indicators on which significant differences across clusters were observed.

Program Attendance
Contribution to Community Well-being
Staff Continuing Education
Services Suited to Community
Awareness of Services
Inter-library Cooperation
Convenience of Location
Building Appeal
Relations with Community Agencies
Staff Contact with Users
Staff Suited to Community
Building Suited to the Community
Efficiency
Flexibility
Services Are Free
Staff Size
Public Opinion
Staff Helpfulness
Range of Services
Users as Percent of Population
Managerial Competence
Volume of Reference Questions
Number of Materials Owned
Staff Quality
User Safety
Goal Achievement
Parking
Materials Quality
Special Group Services
Staff Morale

Figure 16. Indicators on Which Directors' Library Performance Ratings Differed Across Clusters Based on Role Choices

4.0 CONCLUSIONS

The central conclusions of the study relate to indicators of public library effectiveness (those characteristics that describe a library's effectiveness) and the dimensions (broad categories) derived from them.

Respondents rated a list of indicators in terms of their preference for each indicator's ability to describe a library's effectiveness. The indicators that are most preferred by all constituent groups (in the top ten for all constituents) relate to quantities and qualities of service, and access to service. The dimensions of effectiveness, which were derived from the preference question, were:

1: Outputs and Inputs
2: Internal Processes
3: Community Fit
4: Access to Materials
5: Physical Facilities
6: Management Elements
7: Service Offerings
8: Service to Special Groups.

The librarian respondents were also asked to rate the performance of their library on each of the indicators. The indicators on which library performance was rated most highly by all constituent groups (in the top ten for all constituents) include:

Intellectual Freedom,
Free-ness of Services,
two items related to staff-user contact,
two items related to use (Circulation and Equipment Usage),
two items related to users (Public Opinion and Variety of Users),
one item related to materials, and
one item related to relations with other libraries.

Those on which performance was rated lowest were:

four items of community relations (Public Relations, Awareness of Services, Community Analysis, and Public Involvement in Library),
two staff items (Staff Size and Staff Expenditure),
two areas of perennial concern (Board Activeness and Parking),
Energy Efficiency, and
Library Products.

The dimensions of effectiveness, which were derived from the performance question, were:

1: Usage and Community Impact
2: Materials
3: Staff
4: Management Quality

5: Expenditures
6: Building
7: In-Library Services
8: Community Fit
9: Public Involvement
10: Building Access
11: Larger Materials Issues
12: User Reaction
13: Miscellaneous

An important methodological finding is that the response to the "preference" question, regarding the indicators themselves, is substantially different from the response to the "performance" question. This supports a key assumption of the study. Furthermore, it is of general interest because the preference approach had not been used before, and this study compares the two approaches.

The four most popular roles, as identified by the librarian respondents, were:

Reference Library
Popular Materials Center
Preschoolers' Door to Learning
Community Information Center.

The role choices can be reduced to two internally correlated sets: One encompasses roles with a longer public library tradition; the other, roles that are newer, relatively more progressive, or require special library resources.

Organizational domain, or role choices, does influence library performance, as expected. Libraries that place priorities on different roles have different performance profiles on the indicators included in the survey. It was considered possible, though the arguments are less compelling, that an individual's role choices would affect his or her indicator preferences. No such link was found.

An interesting sidelight to the roles investigation is the lack of consensus on their library's current roles among librarians within the same library. This suggests a potential management problem as well as an interesting evaluation issue: people with different expectations of the same library can be expected to differ in their evaluation of that library. Such differences among external constituents are probably to be expected, but differences among internal constituents are surprising.

The most surprising conclusion of the study is that there is more agreement than disagreement among the various public library constituents as to what constitutes effectiveness. While the sampling method does not permit generalizing to the nation's libraries, the breadth of constituent types surveyed and the volume of response in every constituent group suggests the strong possibility that the findings would be replicated in a national study with purely random sampling.

Several explanations can be advanced as to why substantial differences are not evident in the data. First, there may be a conventional view of the public library that is generally shared among the citizenry, and that view does not change substantially when one moves from positions outside the library to positions inside the library or from general citizenry (Users) to elite citizenry (Local Officials and Community Leaders). The well-established "halo" effect that surrounds the public library -- an essentially non-critical, positive view of the public library institution held by the general populace -- lends credence to this explanation.

The second possible explanation is that the instrument is not sensitive enough to discern differences across constituent groups. Given that differences among constituent groups were registered for selected indicators (such as Circulation, which ranked sixth for Library Managers, 44th for Users, and 19th for Local Officials) this explanation loses plausibility.

Third, the method of sampling -- essentially, selection by the library directors -- may have biased the sample toward similarity of perception. This explanation cannot be countered without replication on randomly selected subjects, and must be accepted as possible. However, it can be argued that the responses from selected respondents would yield more thoughtful answers; and that a study whose purpose is to build models, rather than to represent the universe proportionally, is served best by a selected sample rather than a probability sample.

The high response to the survey instruments suggests, first, that the issue is salient among constituents internal and external to the library and ,second, that even busy local officials and community leaders will respond to a survey about public library matters, where an appropriate method is used. The one employed for this study worked and is worth using again.

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Appendix A.
Introductory Letter to Directors

The Public Library Effectiveness Study

[address]

Dear:

The survival of public institutions depends on how effective they are and how they present their effectiveness to the world. This is certainly true for public libraries.

What is an effective public library? How do we know whether a library is effective?

The U.S. Department of Education, Office of Educational Research and Improvement, has funded The Public Library Effectiveness Study to discover what people look at when judging a library's effectiveness.

Across the nation we are seeking the opinion of several key constituents of the public library, including local officials, community leaders, library users, friends of the library, trustees, and library staff. The results will point to the areas of the library that deserve the attention of library staff,the public, and civic leaders.

The Study is not a test of any of the participating libraries..

Your library has been carefully selected to represent a particular region and size of public library. The participation of your library is essential to the validity of the study.

We need your help in two ways: First, to establish contact with about 20 people in your community, including community leaders, staff, and users; and second, to answer a questionnaire. All of it should take from 75 to 100 minutes of your time, spread over a month.

It will be worth it.

ADVISORS: Kathy Arnold, Director,Pottstown Public Library / Herbert A. Davis, Trusteè, Baltimore County Public Library / Sandy Dolnick, Executive Director, Friends of Libraries USA / Fred Philipp, President, Ingram Library Services / Eleanor Jo Rodger, Executive Director, Public Library Association / Elliot Shelkrot, Director, Free Library of Philadelphia / Kathryn Stephanoff, Director, Allentown Public Library

In addition to helping all public libraries, the Study will be directly useful to you by

- providing you with additional contacts with key constituents, especially local officials and community leaders,
- giving you an idea of how best to represent the library to the internal and external constituencies,
- providing a summary of the final Study report,
- providing the responses for a group of libraries (not individual libraries) similar to yours,
- entering your library in a raffle for 10 copies of a hardback bestseller of your choice, from Ingram Library Services.

Of course, all responses will be confidential. The identities of individuals and the findings for specific libraries will never be reported.

Within the next week one of us will phone to ask for your help.

We look forward to working with you. In the meantime, we will be happy to answer any questions. Please call.

Sincerely,

Thomas Childers, Ph.D.
Drexel University
College of Information Studies
Philadelphia, PA 19104
(215) 895-2479

Nancy Van House, Ph.D.
University of California
Sch. of Library
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Assisted by

Rebecca Fisher

Sue Easun

Appendix B.
Names Questionnaire

The Public Library Effectiveness Study

What is an effective public library?"

To find out what people look at to determine effectiveness, we need the opinion of "key constituents" of your library. The first step is to identify local officials, community leaders, library users, friends of the library, trustees, and library staff.

Of course, all responses will be confidential. The identities of individuals and responses for specific libraries will be reported to no one.

A. Identify six (6) local officials from your funding jurisdiction(s) who have an official role related to the library. They may be elected or appointed -- such as budget officers, city managers, county planners, personnel officers, councilpersons, etc. They do not need to be users or supporters of the library. (We will ask you to contact them with a questionnaire, which they will return to us.)

If you cannot identify 6, name as many as you can.

B. Identify six (6) community leaders who have some influence, direct or indirect, on library decisions -- such as heads of chambers of commerce and community groups, newpspaper editors, key businesspeople, directors of educational and cultural institutions, heads of political groups. They do not need to be users or supporters of the library. (We will ask you to contact them with a questionnaire, which they will return to us.)

If you cannot identify 6, name as many as you can.

C. Identify three (3) of your library's managers, other than yourself, beginning at the highest level of the library (or system). (We will contact them directly.)

If you cannot identify 3, name as many as you can.

D. Identify four (4) staff, other than those in C, who serve the public directly, in a professional capacity. Examples: reference librarian, children's librarian. (We will contact them directly.)

If you cannot identify 4, name as many as you can.

E. Identify four (4) trustees of your library, elected or appointed. (We will contact them directly.)

If your library does not have trustees, check here: ____.

If you have fewer than 4 trustees, list as many as you have.

F. Identify four (4) active members of the Friends of the Library Group, or equivalent for your library system. (We will contact them directly.)

If you have no Friends group, check here: ___.

Send it back right away ... and thank you very much. We'll be in touch again soon.

The Public Library Effectiveness Study
Drexel University
College of Information Studies
Philadelphia, Pennsylvania 19104

Appendix C.
Instructions for the Directors

The Public Library Effectiveness Study

---

1. Community Leaders and Local Officials

Enclosed are envelopes for the community leaders and local officials whom you named for this study. Each envelope contains a questionnaire that is virtually identical to Parts A and C of your own questionnaire; a cover letter that explains the study; and a stamped return envelope.

We suggest that you hand the envelope directly to the addressee. This will give you another face-to-face contact with these community leaders and local officials, and it will give you a chance to encourage them fill out the form. The questionnaire should take from 5 to 15 minutes of their time.

2. Library Users

[See instructions on the envelope]

3. Yourself

There are two questionnaires for you. Please fill them both out as soon as you possibly can. Return them in the enclosed envelope.

Library Users

This envelope contains copies of the questionnaire for users. It will take about 5 to 15 minutes of the user's time (average, 8 minutes).

We need completed questionnaires from 6 adult library users.

Would you please

- Select a day to hand out the questionnaire.
- Position one of your best "salesmen" by the door.
- Have the staff person approach every 3d person who enters who appears to be 18 or older.
- Ask the person to fill out the questionnaire.

You will need

- a table for the respondents to work at
- several pencils
- a box for the completed forms.

Hints for distributing:

- Emphasize that the study will take only an average of 8 minutes and that it will help your library, both through the raffle and by providing helpful information.
- Select users who range across ethnic groups, races, ages, sex, occupation, and education -- to the extent you can anticipate that. Don't choose just frequent users or the librarians' friends.

When you have collected 6 completed forms, simply bundle them up, put them in the white return envelope, and send them to us.

Appendix D. Cover Letter to Respondents

The Public Library Effectiveness Study

[name, address]

The survival of public institutions depends on how effective they are and how they present that to the world.This is certainly true for public libraries.

What is an effective public library?

With the help of your library director, you have been carefully selected to represent librarians from libraries like yours in a national study.

The Study will help your library by identifying what is valued by various opinion-leaders. In turn, this will help focus library decision-making and planning for better service and greater efficiency.

Your participation is critical for the study to be accurate. Of course, your identity will be absolutely confidential and data on your library will not be reported. The code on page 2 is for mailing purposes only.

When you return the questionnaire, your library will qualify for one more chance in a raffle for 10 copies of a hardback bestseller of your library's choice, from Ingram Library Services. And, if you would like a summary of the study results, put your name and address on the *outside* of the return envelope (not on the questionnaire).

Would you please fill this out and return it *immediately*? We will be happy to answer any questions if you write or call.

Thank you very much for your help.

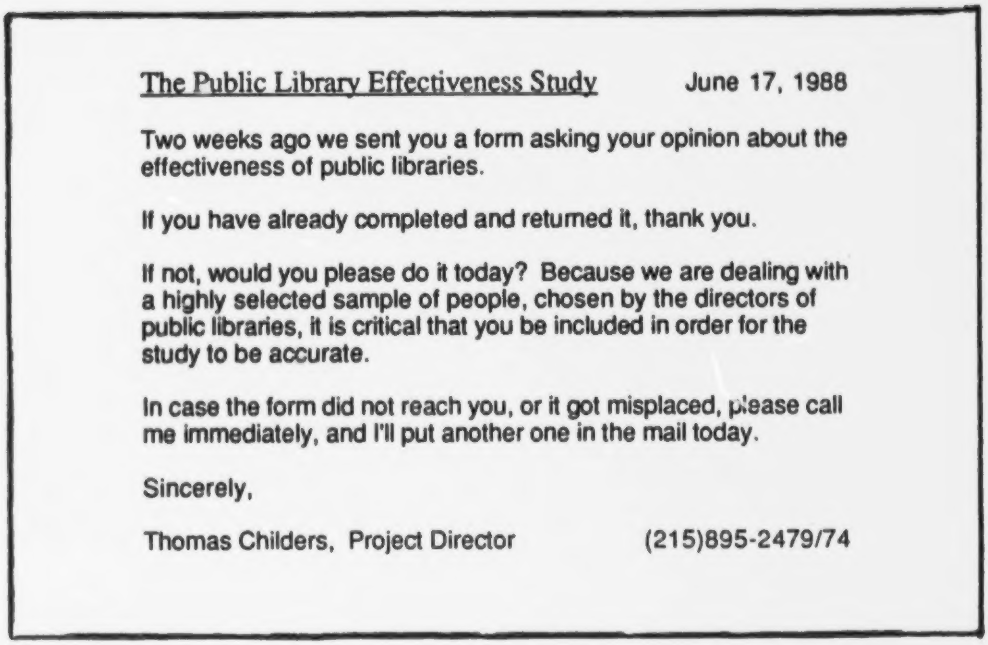
Sincerely,

Thomas Childers, Ph.D.
Drexel University
College of Information Studies
Philadelphia, PA 19104
(215) 895-2479

Nancy Van House, Ph.D.
University of California
School of Library & Information Studies
Berkeley, CA 94720
(415)642-0855

ADVISORS: Kathy Arnold, Pottstown Public Library / Herbert A. Davis, Trustee, Baltimore County Public Library / Sandy Dolnick, Executive Director, Friends of Libraries USA / Fred Philipp, President, Ingram Library Services / Eleanor Jo Rodger, Executive Director, Public Library Association / Elliot Shelkrot, Director, Free Library of Philadelphia / Kathryn Stephanoff, Director, Allentown Public Library

Appendix E.
Postcard Follow-Up



The Public Library Effectiveness Study June 17, 1988

Two weeks ago we sent you a form asking your opinion about the effectiveness of public libraries.

If you have already completed and returned it, thank you.

If not, would you please do it today? Because we are dealing with a highly selected sample of people, chosen by the directors of public libraries, it is critical that you be included in order for the study to be accurate.

In case the form did not reach you, or it got misplaced, please call me immediately, and I'll put another one in the mail today.

Sincerely,

Thomas Childers, Project Director (215)895-2479/74

Appendix F.
Follow-Up Cover Letter

The Public Library Effectiveness Study

July 6, 1988

:

We recently sent you a questionnaire concerning public library effectiveness. As of today we have not yet received your response.

This is a major research project funded by the U.S. Department of Education to help public libraries identify the characteristics valued by people in its community. This information will help focus library decision-making for better service and greater efficiency.

We are surveying selected people in only 50 communities nationwide. You have been carefully chosen on the recommendation of your public library director. Without your response, people like you, from communities like yours, are not represented.

In case your questionnaire has been misplaced, a replacement is enclosed. Please take the time right now to fill it out. It will take from 5 to 15 minutes.

Your response will be absolutely confidential. The code on the questionnaire is for mailing purposes only.

When you return the questionnaire, your library will qualify for one more chance in a raffle for 10 copies of a hardback bestseller of your library's choice from Ingram Library Services.

If you would like a summary of the study results, put your name on the outside of the return envelope (not on the questionnaire). We expect the results to be ready late this year.

We will be happy to answer any questions, as will your public library's director.

ADVISORS: Kathy Arnold, Pottstown Public Library / Herbert A. Davis, Trustee, Baltimore County Public Library / Sandy Dolnick, Executive Director, Friends of Libraries USA / Fred Philipp, President, Ingram Library Services / Eleanor Jo Rodger, Executive Director, Public Library Association / Elliot Shelkrot, Director, Free Library of Philadelphia / Kathryn Stephanoff, Director, Allentown Public Library

If you have already returned the questionnaire, thank you, and please ignore this reminder. Do not fill out a second questionnaire.

Thank you very much for your help.

Sincerely,

Tom Childers

Thomas Childers, Ph.D.
College of Information Studies
Drexel University
Philadelphia, PA 19104
(215)895-2479

Nancy Van House

Nancy Van House, Ph.D.
School of Library &
Information Studies
University of California
Berkeley, CA 94720
(415)642-0855

Appendix G.
Preference Questionnaire

The Public Library Effectiveness Study

Imagine that you want to describe a public library's effectiveness to another librarian. How important would it be for you to know each of the following about that library?

- You are not **rating a particular library**; instead, you are telling us what you look at in evaluating a library.
- Assume that any item can be measured.
- We need your opinions. Please don't consult with others or delegate this.
- Your identity will be completely confidential, and we will not report data on your local library.

In describing a public library, how important would it be for you to know each of the following about that library?

Circle the number closest to your opinion.

Example: " Seating per capita 1 2 3 4 5 0" would mean that you think "seating per capita" is not very important to know in describing a library's effectiveness.

		Not important to know				Essential to know	No opinion
1.	How easily the library building is identified from the street	1	2	3	4	5	0
2.	Energy efficiency of the library building	1	2	3	4	5	0
3.	Number of library materials* borrowed by users	1	2	3	4	5	0
	*["Materials" exist in any format: books, magazines, computer software, films, etc.]						
4.	Activeness of library board members	1	2	3	4	5	0
5.	Convenience of library hours to users	1	2	3	4	5	0
6.	Amount of total expenditures	1	2	3	4	5	0
7.	Number of people attending library programs (such as film programs, talks, demonstrations, etc.)	1	2	3	4	5	0
8.	Contribution of library to individual or community well-being	1	2	3	4	5	0
9.	Range of materials available (books, magazines, films, computer software, video cassettes, etc.)	1	2	3	4	5	0
10.	Percentage of reference questions answered	1	2	3	4	5	0
11.	Continuing education for staff	1	2	3	4	5	0
12.	Voluntary contributions to the library (for example, gifts, fund drives, and volunteer time)	1	2	3	4	5	0
13.	Handicapped accessibility	1	2	3	4	5	0
14.	How much planning and evaluation the library does	1	2	3	4	5	0
15.	Number of people who come to the library	1	2	3	4	5	0
16.	How well library services are suited to the community	1	2	3	4	5	0
17.	Number and quality of library's own productions, publications, recordings, etc	1	2	3	4	5	0

_ _ – _ _ _ – _ _ _ _

This code is for mailing purposes only, not identification.

In describing a public library, how important would it be for you to know each of the following about that library?

		Not important to know				Essential to know	No opinion
18.	Whether the library has recently done a user study or community analysis	1	2	3	4	5	0
19.	Community's awareness of the services offered by the library	1	2	3	4	5	0
20.	Cooperation with other libraries	1	2	3	4	5	0
21.	Convenience of library's location	1	2	3	4	5	0
22.	Appeal of library building and interiors	1	2	3	4	5	0
23.	Library's relationship with other community agencies	1	2	3	4	5	0
24.	Users' evaluation of services	1	2	3	4	5	0
25.	Amount of staff contact with users	1	2	3	4	5	0
26.	Likelihood that materials wanted will be immediately available	1	2	3	4	5	0
27.	How well staff are suited to the library's community	1	2	3	4	5	0
28.	Newness of library materials	1	2	3	4	5	0
29.	Suitability of building and equipment	1	2	3	4	5	0
30.	Efficiency of internal library operations	1	2	3	4	5	0
31.	Extent of public involvement in library decision-making	1	2	3	4	5	0
32.	Number of materials used in the library	1	2	3	4	5	0
33.	Variety of types of library users	1	2	3	4	5	0
34.	Expenditure for staff	1	2	3	4	5	0
35.	Amount of use of equipment by the public (such as copiers, microfilm readers, computers, etc.)	1	2	3	4	5	0
36.	Flexibility of the library, or ability to change	1	2	3	4	5	0
37.	Amount of public relations or publicity efforts	1	2	3	4	5	0
38.	Extent to which services, materials, and facilities are available free of charge	1	2	3	4	5	0
39.	Size of staff	1	2	3	4	5	0
40.	Amount of library use compared with the use of other community services or events (e.g., sports events)	1	2	3	4	5	0

In describing a public library, how important would it be for you to know each of the following about that library?

		Not important to know				Essential to know	No opinion
41.	Extent to which the library has written policies, procedures, and standards	1	2	3	4	5	0
42.	Public opinion of the library	1	2	3	4	5	0
43.	Amount of materials the library gets for users from outside sources	1	2	3	4	5	0
44.	Extent to which staff are helpful, courteous, and concerned	1	2	3	4	5	0
45.	Range of library services available	1	2	3	4	5	0
46.	Expenditures for materials	1	2	3	4	5	0
47.	Number of library users, compared to total population	1	2	3	4	5	0
48.	How much information library has about other libraries' collections	1	2	3	4	5	0
49.	Speed of service to user	1	2	3	4	5	0
50.	Managerial competence	1	2	3	4	5	0
51.	Number of reference questions asked by users	1	2	3	4	5	0
52.	Library's support of freedom of access to information (intellectual freedom)	1	2	3	4	5	0
53.	Number of materials (items) owned by the library	1	2	3	4	5	0
54.	Quality of staff (education, talent, etc.)	1	2	3	4	5	0
55.	Safety of users	1	2	3	4	5	0
56.	Extent to which the library achieves its goals	1	2	3	4	5	0
57.	Number of times a given item (book, film, etc.,) is used	1	2	3	4	5	0
58.	Adequacy of parking	1	2	3	4	5	0
59.	Quality of materials	1	2	3	4	5	0
60.	Services to special groups, such as minorities, the aging, toddlers, and others	1	2	3	4	5	0
61.	Staff morale	1	2	3	4	5	0

Add any items that you consider *essential* in describing a library's effectiveness:

62. ____

63. ____

64. ____

Appendix H.
Performance Questionnaire

For each item, **how does *your library* rate, compared to an "ideal" public library for this community?**

Circle 1 [very low] to 4 [very high] for every item.

- Your ratings will not be used in any way to score your library. We are merely interested in the range of librarian responses to each item.

- "Library" refers to your *total* library *system* -- all its outlets and branches.

	Low			**High**
1. How easily the library building is identified from the street	1	2	3	4
2. Energy efficiency of the library building	1	2	3	4
3. Number of library materials* borrowed by users	1	2	3	4
*["Materials" exist in any format: books, magazines, computer software, films, etc.]				
4. Activeness of library board members	1	2	3	4
5. Convenience of library hours to users	1	2	3	4
6. Amount of total expenditures	1	2	3	4
7. Number of people attending library programs (such as film programs, talks, demonstrations, etc.)	1	2	3	4
8. Contribution of library to individual or community well-being	1	2	3	4
9. Range of materials available (books, magazines, films, computer software, video cassettes, etc.)	1	2	3	4
10. Percentage of reference questions answered	1	2	3	4
11. Continuing education for staff	1	2	3	4
12. Voluntary contributions to the library (for example, gifts, fund drives, and volunteer time)	1	2	3	4
13. Handicapped accessibility	1	2	3	4
14. How much planning and evaluation the library does	1	2	3	4
15. Number of people who come to the library	1	2	3	4
16. How well library services are suited to the community	1	2	3	4
17. Number and quality of library's own productions, publications, recordings, etc	1	2	3	4
18. Whether the library has recently done a user study or community analysis	1	2	3	4

How does your library rate, compared to an "ideal" public library for this community?

		Low			High
19.	Community's awareness of the services offered by the library	1	2	3	4
20.	Cooperation with other libraries	1	2	3	4
21.	Convenience of library's location	1	2	3	4
22.	Appeal of library building and interiors	1	2	3	4
23.	Library's relationship with other community agencies	1	2	3	4
24.	Users' evaluation of services	1	2	3	4
25.	Amount of staff contact with users	1	2	3	4
26.	Likelihood that materials wanted will be immediately available	1	2	3	4
27.	How well staff are suited to the library's community	1	2	3	4
28.	Newness of library materials	1	2	3	4
29.	Suitability of building and equipment	1	2	3	4
30.	Efficiency of internal library operations	1	2	3	4
31.	Extent of public involvement in library decision-making	1	2	3	4
32.	Number of materials used in the library	1	2	3	4
33.	Variety of types of library users	1	2	3	4
34.	Expenditure for staff	1	2	3	4
35.	Amount of use of equipment by the public (such as copiers, microfilm readers, computers, etc.)	1	2	3	4
36.	Flexibility of the library, or ability to change	1	2	3	4
37.	Amount of public relations or publicity efforts	1	2	3	4
38.	Extent to which services, materials, and facilities are available free of charge	1	2	3	4
39.	Size of staff	1	2	3	4
40.	Amount of library use compared with the use of other community services or events (e.g., sports events)	1	2	3	4

How does your library rate, compared to an "ideal" public library for this community?

	Low			High
41. Extent to which the library has written policies, procedures, and standards	1	2	3	4
42. Public opinion of the library	1	2	3	4
43. Amount of materials the library gets for users from outside sources	1	2	3	4
44. Extent to which staff are helpful, courteous, and concerned	1	2	3	4
45. Range of library services available	1	2	3	4
46. Expenditures for materials	1	2	3	4
47. Number of library users, compared to total population	1	2	3	4
48. How much information library has about other libraries' collections	1	2	3	4
49. Speed of service to user	1	2	3	4
50. Managerial competence	1	2	3	4
51. Number of reference questions asked by users	1	2	3	4
52. Library's support of freedom of access to information (intellectual freedom)	1	2	3	4
53. Number of materials (items) owned by the library	1	2	3	4
54. Quality of staff (education, talent, etc.)	1	2	3	4
55. Safety of users	1	2	3	4
56. Extent to which the library achieves its goals	1	2	3	4
57. Number of times a given item (book, film, etc.,) is used	1	2	3	4
58. Adequacy of parking	1	2	3	4
59. Quality of materials	1	2	3	4
60. Services to special groups, such as minorities, the aging, toddlers, and others	1	2	3	4
61. Staff morale	1	2	3	4

If you added items in Part A, page 4, rate them, too:

62.	0	1	2	3
63.	0	1	2	3
64.	0	1	2	3

Appendix I.
Roles Questionnnaire

Public Library Effectiveness Study

Your Library's Roles

Not all public libraries do the same things.

In your opinion, what is the importance of each role in your library's current program of services?

Rate for your whole library system, from "0," Unimportant to "3," Important.

- Circle one number for each role.
- Again, your answers will be strictly confidential.

1. Community Activities Center

Unimportant **Important**
0 1 2 3

The library is a central focus point for community activities, meetings and services. It works closely with other community agencies and organizations to provide a coordinated program of social, cultural and recreational services. The library may provide both meeting room space and equipment for community- or library-sponsored programs.

2. Community Information Center

Unimportant **Important**
0 1 2 3

The library is a clearinghouse for current information on community organizations, issues, and services. The library maintains a high profile as a source of information about community services. It may respond to community problems with specialized services provided both inside and outside the library building. It may create local directories, maintain files of local organizations and service agencies, index local newspapers, or participate in community referral networks.

3. Formal Education Support Center

Unimportant **Important**
0 1 2 3

The library assists students of all ages in meeting educational objectives for *formal* courses of study. This may include students in elementary and secondary schools, colleges, community colleges, universities or technical schools, as well as those involved in training programs, literacy or adult basic education, and continuing education courses. This emphasis on *formal* instruction distinguishes the FORMAL EDUCATION SUPPORT CENTER from the INDEPENDENT LEARNING CENTER, below.

4. Independent Learning Center

Unimportant **Important**
0 1 2 3

The library supports individuals of all ages pursuing a sustained program of learning, independent of any educational provider. These individuals set their own learning objectives. The staff helps learners identify an appropriate learning path, determine needed resources, and obtain these resources from library's collection or through interlibrary loan. Continuing, intensive staff involvement or counseling with individual learners is a distinguishing characteristic of this role. The sustained, systematic nature of the user's quest distinguishes this role.

5. Popular Materials Center

Unimportant **Important**
0 1 2 3

The library features current, high demand, high interest materials in a variety of formats for persons of all ages. The library may actively promote the use of its collections.

6. **Preschoolers' Door to Learning**

Unimportant **Important**
0 1 2 3

The library encourages young children to develop an interest in reading and learning through services for children, and for parents and children together. The library promotes reading readiness from infancy, providing services for self-enrichment and for discovering the pleasures of reading and learning. Services may include programs for infants, parents, and toddlers. (Older children are included in other specific roles.)

7. **Reference Library**

Unimportant **Important**
0 1 2 3

The library provides information for community residents in their pursuit of job-related, personal, and other interests. The library may promote on-site and telephone reference/information services to aid users in locating needed information. Information provided may range from answering practical questions, to specialized business-related research, to questions about government, to consumer information.

8. **Research Center**

Unimportant **Important**
0 1 2 3

The library helps scholars and researchers to conduct in-depth studies, investigate specific areas of knowledge, and create new knowledge. Ordinarily, the library's own collection is a source of exhaustive information in selected subject areas.

9. **Please add** any role that you feel is not covered above:

____

____

____

Appendix J.
Demographic Questions

1. As a local official or community leader, what is your official title(s)? [COMMUNITY LEADERS, LOCAL OFFICIALS]

   OR: What is your position with the library's Friends group? (member, president, chair of committee X, etc.) AND: For approximately how many years have you been a member of the Friends? [FRIENDS OF THE LIBRARY]

   OR: What is the title of your postion in this library? AND: Do you consider yours to be a position of primarily management, or primarily direct service to users? AND: How many years have you been employed by this library? [LIBRARY MANAGERS, LIBRARY SERVICE STAFF]

   OR: What is your position on the board of trustees? (member, president, chair of committee X, etc.) AND: For approximately how many years have you been a member of the library board? [TRUSTEES]

2. Check one: _____ male _____ female [ALL]

3. What was your age on your last birthday? [ALL]

   ___ 18-24
   ___ 25-34
   ___ 35-44
   ___ 45-64
   ___ 64 or older

4. How long ago did you last visit or telephone a public library? [ALL EXCEPT LIBRARIANS]

   __ More than 2 years ago, or never
   __ 1-2 years ago
   __ 6 months to 1 year ago
   __ 3-5 months ago
   __ 1-3 months ago
   __ 2-3 weeks ago
   __ Within the last week or two
   __ Don't remember

APPENDIX K
MEANS, BY CONSTITUENT GROUP

[For wording of questions see Preference Questions, App.G]

QUESTION	CONSTITUENT GROUP	MEAN	STANDARD DEVIATION	N
1	COMMUNITY LEADER	3.9201	1.1050	388
1	FRIEND	4.2647	1.0254	272
1	LIBRARY MANAGER	4.2818	.9152	291
1	LOCAL OFFICIAL	3.9141	1.0793	384
1	SERVICE LIBRARIAN	4.1860	.9993	301
1	TRUSTEE	4.0930	1.0728	258
1	USER	3.9665	1.1698	507
2	COMMUNITY LEADER	2.5389	1.2728	373
2	FRIEND	2.7791	1.3238	258
2	LIBRARY MANAGER	2.6162	1.1787	284
2	LOCAL OFFICIAL	2.7995	1.2607	379
2	SERVICE LIBRARIAN	2.6565	1.1630	294
2	TRUSTEE	3.1016	1.2639	256
2	USER	2.7911	1.3796	474
3	COMMUNITY LEADER	3.7760	1.2229	384
3	FRIEND	3.8801	1.1571	267
3	LIBRARY MANAGER	4.5514	.7374	292
3	LOCAL OFFICIAL	3.9843	1.1308	381
3	SERVICE LIBRARIAN	4.4515	.8275	299
3	TRUSTEE	4.2703	1.0098	259
3	USER	3.3602	1.3885	483
4	COMMUNITY LEADER	3.1257	1.1637	382
4	FRIEND	3.6541	1.1363	266
4	LIBRARY MANAGER	3.5828	.9887	290
4	LOCAL OFFICIAL	3.2686	1.1476	376
4	SERVICE LIBRARIAN	3.6667	1.0838	291
4	TRUSTEE	3.6977	1.1509	258
4	USER	3.1116	1.3368	475
5	COMMUNITY LEADER	4.7775	.5302	391
5	FRIEND	4.8185	.5389	270
5	LIBRARY MANAGER	4.8007	.4252	291
5	LOCAL OFFICIAL	4.7441	.5089	383
5	SERVICE LIBRARIAN	4.6179	.6457	301
5	TRUSTEE	4.6911	.6742	259
5	USER	4.7819	.5999	509
6	COMMUNITY LEADER	3.6354	1.0994	384
6	FRIEND	3.5827	1.0862	266
6	LIBRARY MANAGER	4.2329	.8932	292
6	LOCAL OFFICIAL	3.7599	1.1045	379
6	SERVICE LIBRARIAN	4.1650	.9244	297
6	TRUSTEE	4.0627	1.0958	255
6	USER	3.2679	1.2174	474
7	COMMUNITY LEADER	3.6528	1.0757	386
7	FRIEND	3.6255	.9666	267
7	LIBRARY MANAGER	3.7808	.9415	292
7	LOCAL OFFICIAL	3.7292	1.0063	384
7	SERVICE LIBRARIAN	3.8591	.9641	298
7	TRUSTEE	3.8062	.9301	258

7	USER	2.9713	1.1882	488
8	COMMUNITY LEADER	4.1705	.9368	387
8	FRIEND	4.3507	.8325	268
8	LIBRARY MANAGER	4.2379	.8331	290
8	LOCAL OFFICIAL	4.1003	.9653	379
8	SERVICE LIBRARIAN	4.2075	.8981	294
8	TRUSTEE	4.2946	.8769	258
8	USER	3.9277	1.0890	498
9	COMMUNITY LEADER	4.7191	.5531	388
9	FRIEND	4.7546	.5658	269
9	LIBRARY MANAGER	4.6632	.5421	288
9	LOCAL OFFICIAL	4.5288	.7121	382
9	SERVICE LIBRARIAN	4.6412	.6357	301
9	TRUSTEE	4.5830	.7444	259
9	USER	4.7610	.5779	502
10	COMMUNITY LEADER	3.5891	1.0600	387
10	FRIEND	3.5472	1.1242	265
10	LIBRARY MANAGER	4.2491	.7782	293
10	LOCAL OFFICIAL	3.5288	.9897	382
10	SERVICE LIBRARIAN	4.2060	.8548	301
10	TRUSTEE	3.8275	1.0008	255
10	USER	3.6505	1.2307	475
11	COMMUNITY LEADER	3.4072	1.0659	388
11	FRIEND	3.5376	1.0499	266
11	LIBRARY MANAGER	3.7226	.9129	292
11	LOCAL OFFICIAL	3.3176	1.0889	381
11	SERVICE LIBRARIAN	3.8161	.9499	299
11	TRUSTEE	3.8794	.9907	257
11	USER	3.5000	1.1935	478
12	COMMUNITY LEADER	3.4208	1.0456	385
12	FRIEND	3.6530	1.0217	268
12	LIBRARY MANAGER	3.3048	1.0185	292
12	LOCAL OFFICIAL	3.4711	1.0510	380
12	SERVICE LIBRARIAN	3.2724	1.0451	301
12	TRUSTEE	3.6719	1.0854	256
12	USER	3.2126	1.2023	494
13	COMMUNITY LEADER	3.9974	1.0394	387
13	FRIEND	4.2030	.9963	266
13	LIBRARY MANAGER	3.9450	1.0224	291
13	LOCAL OFFICIAL	4.0679	1.0107	383
13	SERVICE LIBRARIAN	4.1329	.9322	301
13	TRUSTEE	4.0700	1.0546	257
13	USER	4.0768	1.1463	495
14	COMMUNITY LEADER	3.5788	1.0534	387
14	FRIEND	3.7406	.9656	266
14	LIBRARY MANAGER	3.9414	.9226	290
14	LOCAL OFFICIAL	3.5916	1.0173	382
14	SERVICE LIBRARIAN	3.9766	.8990	299
14	TRUSTEE	4.0977	1.0489	256
14	USER	3.4886	1.1763	481
15	COMMUNITY LEADER	3.9820	1.0478	388
15	FRIEND	3.9774	1.0277	266
15	LIBRARY MANAGER	4.4144	.7572	292
15	LOCAL OFFICIAL	4.0888	.9775	383
15	SERVICE LIBRARIAN	4.3488	.8091	301
15	TRUSTEE	4.2946	.9411	258

15	USER	3.3039	1.2497	487
16	COMMUNITY LEADER	4.4315	.8190	387
16	FRIEND	4.5221	.7387	272
16	LIBRARY MANAGER	4.6481	.5897	287
16	LOCAL OFFICIAL	4.4517	.7323	383
16	SERVICE LIBRARIAN	4.6146	.5924	301
16	TRUSTEE	4.6124	.7091	258
16	USER	4.2405	.9788	499
17	COMMUNITY LEADER	3.5377	1.0774	385
17	FRIEND	3.4462	1.0402	260
17	LIBRARY MANAGER	3.1065	.9750	291
17	LOCAL OFFICIAL	3.5684	1.0366	380
17	SERVICE LIBRARIAN	3.3185	1.0607	292
17	TRUSTEE	3.5299	1.0743	251
17	USER	3.6833	1.2105	480
18	COMMUNITY LEADER	3.4609	1.1024	384
18	FRIEND	3.3521	1.0846	267
18	LIBRARY MANAGER	3.5890	1.0063	292
18	LOCAL OFFICIAL	3.5249	1.0298	381
18	SERVICE LIBRARIAN	3.5167	1.0392	300
18	TRUSTEE	3.7589	.9926	253
18	USER	3.0759	1.1806	474
19	COMMUNITY LEADER	4.3103	.8656	390
19	FRIEND	4.3469	.8722	271
19	LIBRARY MANAGER	4.4055	.6952	291
19	LOCAL OFFICIAL	4.2422	.8119	384
19	SERVICE LIBRARIAN	4.4172	.7547	302
19	TRUSTEE	4.3813	.8259	257
19	USER	4.0614	1.1119	505
20	COMMUNITY LEADER	3.8394	.9562	386
20	FRIEND	4.0943	.9265	265
20	LIBRARY MANAGER	3.7713	.9135	293
20	LOCAL OFFICIAL	3.7737	.9196	380
20	SERVICE LIBRARIAN	4.0532	.8853	301
20	TRUSTEE	3.9453	.9314	256
20	USER	4.1332	1.0430	503
21	COMMUNITY LEADER	4.2931	.8132	389
21	FRIEND	4.5221	.6923	272
21	LIBRARY MANAGER	4.4007	.7278	292
21	LOCAL OFFICIAL	4.2723	.8288	382
21	SERVICE LIBRARIAN	4.3344	.7565	299
21	TRUSTEE	4.2891	.8369	256
21	USER	4.5069	.7735	507
22	COMMUNITY LEADER	3.6873	.9346	387
22	FRIEND	3.8487	.9325	271
22	LIBRARY MANAGER	3.8630	.8900	292
22	LOCAL OFFICIAL	3.5643	.9427	381
22	SERVICE LIBRARIAN	3.7600	.8860	300
22	TRUSTEE	3.7461	.9630	256
22	USER	3.7809	1.0665	502
23	COMMUNITY LEADER	3.5518	1.0006	386
23	FRIEND	3.6330	1.0150	267
23	LIBRARY MANAGER	3.7466	.8798	292
23	LOCAL OFFICIAL	3.4619	.9579	381
23	SERVICE LIBRARIAN	3.7200	.8470	300
23	TRUSTEE	3.6890	1.0223	254

23	USER	3.4262	1.1547	488
24	COMMUNITY LEADER	4.1418	.8704	388
24	FRIEND	4.0593	.9775	270
24	LIBRARY MANAGER	4.3540	.7713	291
24	LOCAL OFFICIAL	4.1143	.9199	385
24	SERVICE LIBRARIAN	4.3156	.8186	301
24	TRUSTEE	4.3961	.8060	255
24	USER	3.7964	1.1267	496
25	COMMUNITY LEADER	3.7404	.9289	389
25	FRIEND	3.9623	.9204	265
25	LIBRARY MANAGER	4.1707	.8703	287
25	LOCAL OFFICIAL	3.6939	.9034	379
25	SERVICE LIBRARIAN	4.1993	.8382	296
25	TRUSTEE	4.0157	.8665	254
25	USER	3.8283	1.1492	495
26	COMMUNITY LEADER	4.3204	.7690	387
26	FRIEND	4.3321	.7891	271
26	LIBRARY MANAGER	4.3242	.7027	293
26	LOCAL OFFICIAL	4.2760	.7795	384
26	SERVICE LIBRARIAN	4.2441	.8338	299
26	TRUSTEE	4.1914	.8010	256
26	USER	4.5060	.7610	500
27	COMMUNITY LEADER	3.9404	.9502	386
27	FRIEND	4.0224	.9518	268
27	LIBRARY MANAGER	4.0934	.8589	289
27	LOCAL OFFICIAL	3.8211	.9635	380
27	SERVICE LIBRARIAN	3.9933	.9263	297
27	TRUSTEE	4.0824	.9417	255
27	USER	3.9537	1.1107	497
28	COMMUNITY LEADER	3.9871	.9287	387
28	FRIEND	4.1889	.8695	270
28	LIBRARY MANAGER	4.1828	.7471	290
28	LOCAL OFFICIAL	3.8727	.8967	385
28	SERVICE LIBRARIAN	4.0533	.8522	300
28	TRUSTEE	3.8984	.9484	256
28	USER	4.2380	.9482	500
29	COMMUNITY LEADER	3.9460	.8584	389
29	FRIEND	4.0664	.8581	271
29	LIBRARY MANAGER	4.0068	.8290	292
29	LOCAL OFFICIAL	3.8000	.8699	380
29	SERVICE LIBRARIAN	3.9565	.8119	299
29	TRUSTEE	4.0039	.8471	256
29	USER	4.0060	.9528	500
30	COMMUNITY LEADER	3.6279	1.0657	387
30	FRIEND	3.8074	1.0700	270
30	LIBRARY MANAGER	3.9931	.8779	289
30	LOCAL OFFICIAL	3.6966	1.0517	379
30	SERVICE LIBRARIAN	4.0067	.9463	298
30	TRUSTEE	4.0353	.9895	255
30	USER	3.6921	1.1770	484
31	COMMUNITY LEADER	3.3067	1.0399	388
31	FRIEND	3.4962	1.0095	264
31	LIBRARY MANAGER	3.3693	.8748	287
31	LOCAL OFFICIAL	3.3931	.9601	379
31	SERVICE LIBRARIAN	3.2742	.9404	299
31	TRUSTEE	3.4567	1.0312	254

31	USER	3.4760	1.1329	479
32	COMMUNITY LEADER	3.4635	1.1119	384
32	FRIEND	3.5410	1.0923	268
32	LIBRARY MANAGER	3.8801	.9467	292
32	LOCAL OFFICIAL	3.5013	1.0625	379
32	SERVICE LIBRARIAN	3.7119	1.0408	295
32	TRUSTEE	3.7302	.9439	252
32	USER	3.4576	1.2687	483
33	COMMUNITY LEADER	3.3075	1.1249	387
33	FRIEND	3.3829	1.2025	269
33	LIBRARY MANAGER	3.9144	.9468	292
33	LOCAL OFFICIAL	3.3509	1.0419	379
33	SERVICE LIBRARIAN	3.8833	.9693	300
33	TRUSTEE	3.7294	1.0355	255
33	USER	3.0232	1.2815	474
34	COMMUNITY LEADER	3.2696	1.1401	382
34	FRIEND	3.4737	1.0891	266
34	LIBRARY MANAGER	3.8522	.9553	291
34	LOCAL OFFICIAL	3.3632	1.1016	380
34	SERVICE LIBRARIAN	3.9269	1.0139	301
34	TRUSTEE	3.9526	1.0455	253
34	USER	3.1357	1.2494	479
35	COMMUNITY LEADER	3.4430	1.0681	386
35	FRIEND	3.6015	1.0558	271
35	LIBRARY MANAGER	3.5103	.9250	292
35	LOCAL OFFICIAL	3.4488	1.0390	381
35	SERVICE LIBRARIAN	3.6113	.9618	301
35	TRUSTEE	3.7569	1.0057	255
35	USER	3.3919	1.3071	495
36	COMMUNITY LEADER	3.9845	.9149	388
36	FRIEND	4.1450	.8880	269
36	LIBRARY MANAGER	4.1931	.7874	290
36	LOCAL OFFICIAL	3.8892	.9334	379
36	SERVICE LIBRARIAN	4.1860	.8438	301
36	TRUSTEE	4.2461	.8575	256
36	USER	3.9654	1.0741	492
37	COMMUNITY LEADER	3.4574	1.0231	387
37	FRIEND	3.7852	1.0446	270
37	LIBRARY MANAGER	3.9141	.8197	291
37	LOCAL OFFICIAL	3.3665	.9784	382
37	SERVICE LIBRARIAN	3.9799	.8604	298
37	TRUSTEE	3.9249	1.0031	253
37	USER	3.3368	1.2311	481
38	COMMUNITY LEADER	4.1765	.8665	391
38	FRIEND	4.3246	.9175	268
38	LIBRARY MANAGER	4.1058	.9061	293
38	LOCAL OFFICIAL	4.0470	.9588	383
38	SERVICE LIBRARIAN	4.1225	.9338	302
38	TRUSTEE	4.1211	.9272	256
38	USER	4.3440	.9837	500
39	COMMUNITY LEADER	3.3646	1.0181	384
39	FRIEND	3.5353	1.0347	269
39	LIBRARY MANAGER	4.0719	.9034	292
39	LOCAL OFFICIAL	3.3816	.9903	380
39	SERVICE LIBRARIAN	4.1785	.8768	297
39	TRUSTEE	3.8588	1.0591	255

39	USER	3.3113	1.1870	485
40	COMMUNITY LEADER	3.1474	1.1688	380
40	FRIEND	3.0487	1.2481	267
40	LIBRARY MANAGER	3.2867	1.0604	286
40	LOCAL OFFICIAL	3.0851	1.1947	376
40	SERVICE LIBRARIAN	3.1182	1.1212	296
40	TRUSTEE	3.2302	1.1616	252
40	USER	2.9181	1.3057	476
41	COMMUNITY LEADER	3.0052	1.1319	385
41	FRIEND	3.3170	1.2113	265
41	LIBRARY MANAGER	3.9966	1.0386	293
41	LOCAL OFFICIAL	3.0840	1.1532	381
41	SERVICE LIBRARIAN	4.1362	.9856	301
41	TRUSTEE	4.0117	1.1461	256
41	USER	3.2276	1.2677	479
42	COMMUNITY LEADER	4.0155	.9201	386
42	FRIEND	4.2537	.9440	272
42	LIBRARY MANAGER	4.5017	.6172	293
42	LOCAL OFFICIAL	4.0890	.9404	382
42	SERVICE LIBRARIAN	4.4020	.7265	301
42	TRUSTEE	4.4690	.7946	258
42	USER	3.6286	1.2238	490
43	COMMUNITY LEADER	3.4275	.9915	386
43	FRIEND	3.5634	1.0312	268
43	LIBRARY MANAGER	3.5808	.9411	291
43	LOCAL OFFICIAL	3.4526	.9694	380
43	SERVICE LIBRARIAN	3.6213	.9744	301
43	TRUSTEE	3.5569	.9739	255
43	USER	3.6667	1.1749	483
44	COMMUNITY LEADER	4.4910	.7237	389
44	FRIEND	4.7196	.5398	271
44	LIBRARY MANAGER	4.7705	.4821	292
44	LOCAL OFFICIAL	4.4063	.7486	384
44	SERVICE LIBRARIAN	4.7086	.5356	302
44	TRUSTEE	4.6822	.6717	258
44	USER	4.5743	.7285	505
45	COMMUNITY LEADER	4.5205	.6940	390
45	FRIEND	4.6900	.5772	271
45	LIBRARY MANAGER	4.5563	.6202	293
45	LOCAL OFFICIAL	4.4178	.7364	383
45	SERVICE LIBRARIAN	4.6445	.5567	301
45	TRUSTEE	4.5529	.6960	255
45	USER	4.6255	.6828	502
46	COMMUNITY LEADER	3.5117	1.0707	385
46	FRIEND	3.6778	1.0613	270
46	LIBRARY MANAGER	4.3151	.8394	292
46	LOCAL OFFICIAL	3.5556	1.0547	378
46	SERVICE LIBRARIAN	4.3023	.8316	301
46	TRUSTEE	4.0906	.9758	254
46	USER	3.5514	1.1952	477
47	COMMUNITY LEADER	3.7010	1.1082	388
47	FRIEND	3.7463	1.1062	268
47	LIBRARY MANAGER	4.3425	.7683	292
47	LOCAL OFFICIAL	3.7323	1.1200	381
47	SERVICE LIBRARIAN	4.2658	.8057	301
47	TRUSTEE	4.1984	.9700	257

47	USER	3.0871	1.2606	482
48	COMMUNITY LEADER	3.4974	1.0891	388
48	FRIEND	3.6929	1.0127	267
48	LIBRARY MANAGER	3.3368	.9948	291
48	LOCAL OFFICIAL	3.3820	1.0066	377
48	SERVICE LIBRARIAN	3.4396	.9630	298
48	TRUSTEE	3.5391	.9774	256
48	USER	3.7345	1.1981	501
49	COMMUNITY LEADER	4.0982	.8702	387
49	FRIEND	4.1919	.8564	271
49	LIBRARY MANAGER	4.3038	.6723	293
49	LOCAL OFFICIAL	4.0729	.8207	384
49	SERVICE LIBRARIAN	4.1467	.8128	300
49	TRUSTEE	4.1479	.8759	257
49	USER	4.2222	.9215	504
50	COMMUNITY LEADER	3.9948	.9803	386
50	FRIEND	4.2096	.9153	272
50	LIBRARY MANAGER	4.2150	.8709	293
50	LOCAL OFFICIAL	4.0796	.9419	377
50	SERVICE LIBRARIAN	4.2867	.8327	300
50	TRUSTEE	4.4567	.8365	254
50	USER	3.8909	1.1226	486
51	COMMUNITY LEADER	3.2052	1.0883	385
51	FRIEND	3.1418	1.1161	268
51	LIBRARY MANAGER	3.9863	.9080	292
51	LOCAL OFFICIAL	3.1455	.9920	378
51	SERVICE LIBRARIAN	3.9431	.9519	299
51	TRUSTEE	3.5059	1.0713	253
51	USER	2.9338	1.2408	468
52	COMMUNITY LEADER	3.8523	1.1717	386
52	FRIEND	4.1985	1.0593	267
52	LIBRARY MANAGER	4.1575	.9927	292
52	LOCAL OFFICIAL	3.6976	1.1687	377
52	SERVICE LIBRARIAN	4.2040	.9737	299
52	TRUSTEE	4.1400	1.0644	250
52	USER	4.0480	1.1461	479
53	COMMUNITY LEADER	3.6710	1.0360	386
53	FRIEND	3.7380	1.0791	271
53	LIBRARY MANAGER	4.1336	.8770	292
53	LOCAL OFFICIAL	3.7079	1.0178	380
53	SERVICE LIBRARIAN	4.2367	.8659	300
53	TRUSTEE	3.9059	1.0267	255
53	USER	3.6563	1.2111	483
54	COMMUNITY LEADER	4.0567	.8990	388
54	FRIEND	4.2825	.8343	269
54	LIBRARY MANAGER	4.3883	.7266	291
54	LOCAL OFFICIAL	3.9844	.9082	384
54	SERVICE LIBRARIAN	4.4100	.7857	300
54	TRUSTEE	4.3992	.8178	258
54	USER	4.0600	1.0652	500
55	COMMUNITY LEADER	3.4182	1.1566	385
55	FRIEND	3.7865	1.1517	267
55	LIBRARY MANAGER	3.5070	1.1293	286
55	LOCAL OFFICIAL	3.5556	1.1393	378
55	SERVICE LIBRARIAN	3.5932	1.1022	295
55	TRUSTEE	3.8740	1.1246	254

55	USER	3.7857	1.2239	490
56	COMMUNITY LEADER	3.6943	1.0810	386
56	FRIEND	3.9240	1.0161	263
56	LIBRARY MANAGER	4.0793	.8788	290
56	LOCAL OFFICIAL	3.8544	.9811	371
56	SERVICE LIBRARIAN	4.0933	.9457	300
56	TRUSTEE	4.2578	.9517	256
56	USER	3.6327	1.1628	471
57	COMMUNITY LEADER	2.8088	1.1173	387
57	FRIEND	2.9160	1.1747	262
57	LIBRARY MANAGER	3.5868	1.0688	288
57	LOCAL OFFICIAL	2.8503	1.1197	374
57	SERVICE LIBRARIAN	3.3289	1.0777	301
57	TRUSTEE	3.1850	1.0967	254
57	USER	2.7666	1.2967	467
58	COMMUNITY LEADER	3.9949	.9845	391
58	FRIEND	4.1218	.9006	271
58	LIBRARY MANAGER	3.9452	.8796	292
58	LOCAL OFFICIAL	3.8921	.9226	380
58	SERVICE LIBRARIAN	3.8372	.9292	301
58	TRUSTEE	3.9031	.9222	258
58	USER	4.2345	1.0253	499
59	COMMUNITY LEADER	4.4113	.7075	389
59	FRIEND	4.5185	.6663	270
59	LIBRARY MANAGER	4.4464	.7440	289
59	LOCAL OFFICIAL	4.2632	.7509	380
59	SERVICE LIBRARIAN	4.4448	.6651	299
59	TRUSTEE	4.4180	.7310	256
59	USER	4.5172	.7550	495
60	COMMUNITY LEADER	3.9130	1.0266	391
60	FRIEND	4.2472	.8129	271
60	LIBRARY MANAGER	4.0481	.8970	291
60	LOCAL OFFICIAL	3.9712	.9203	382
60	SERVICE LIBRARIAN	4.1761	.7909	301
60	TRUSTEE	4.1550	.9078	258
60	USER	4.0514	1.0838	486
61	COMMUNITY LEADER	3.8103	1.0366	390
61	FRIEND	4.2222	.9340	270
61	LIBRARY MANAGER	4.3093	.8472	291
61	LOCAL OFFICIAL	3.8095	1.0758	378
61	SERVICE LIBRARIAN	4.4305	.8233	302
61	TRUSTEE	4.4358	.8865	257
61	USER	3.9713	1.1388	488

Appendix L.
Mean Ratings of Performance, Ranked, All Librarian Respondents

Indicator	Mean	Standard Deviation
Support of Intellectual Freedom	3.58	.63
Free-ness of Services	3.54	.62
Staff Contact with Users	3.48	.62
Staff Helpfulness	3.41	.65
Inter-Library Cooperation	3.40	.71
Variety of Users	3.36	.69
Range of Materials	3.32	.74
Public Opinion	3.32	.66
Circulation	3.32	.67
Equipment Usage	3.31	.70
Reference Fill Rate	3.31	.64
Convenience of Location	3.31	.73
Range of Services	3.29	.70
Volume of Reference Questions	3.27	.68
Number of Visits	3.27	.68
Convenience of Hours	3.27	.72
Staff Quality	3.25	.70
Materials Quality	3.24	.67
Contribution to Community Wellbeing	3.23	.70
Staff Suited to Community	3.22	.66
Services Suited to Community	3.21	.65
In-Library Use of Materials	3.20	.65
User Safety	3.17	.66
Building Easy to Identify	3.15	.83
Newness of Materials	3.13	.72
Number of Materials Owned	3.10	.78
Written Policies, etc.	3.10	.85
Building Appeal	3.10	.84
Materials Turnover	3.08	.68
Managerial Competence	3.07	.76
Users' Evaluation	3.06	.77
Speed of Service	3.02	.61
Handicapped Access	3.01	.90
Special Group Services	3.01	.78
Goal Achievement	2.97	.59
Relations with Community Agencies	2.94	.75
Flexibility of Library	2.94	.81
Amount of Planning and Evaluation	2.89	.88
Inter-Library Loan	2.88	.77
Information About Other Collections	2.88	.79
Users Per Capita	2.85	.79
Efficiency	2.82	.76
Building Suitability	2.79	.86
Total Expenditures	2.78	.89
Materials Availability	2.78	.69

Indicator	Mean	Standard Deviation
Library Use Compared With Other Services/Events	2.77	.79
Program Attendance	2.75	.86
Voluntary Contributions	2.70	.92
Materials Expenditure	2.69	.88
Staff Continuing Education	2.69	.95
Staff Morale	2.68	.82
Public Relations	2.67	.89
Board Activeness	2.66	.90
Community Analysis	2.62	.12
Awareness of Services	2.61	.75
Staff Size	2.57	.86
Staff Expenditures	2.54	.91
Parking	2.44	.03
Energy Efficiency	2.41	.88
Library Products	2.37	.96
Public Involvement in Library	2.10	.81

Appendix M.
Factor Analysis, Indicator Preferences, All Respondents

Indicator	FACTOR									
	1	2	3	4	5	6	7	8	9	h-square
USERSPCT	.72	.15	.27	.03	.01	-.01	.02	.07	.09	.63
VISITS	.70	.04	.33	-.13	.03	.10	.11	.03	-.08	.65
REFQNS	.68	.26	.12	.28	.07	.01	-.02	.01	-.12	.64
CIRC	.67	.11	.15	-.15	-.03	.20	.06	.07	-.16	.59
VARUSERS	.64	.15	.31	.18	.06	.10	.01	.01	.08	.58
TURNOVER	.62	.19	.04	.30	.11	.05	-.10	.08	-.10	.55
MATSEXP	.60	.41	.01	.07	.02	.18	.10	-.06	.30	.65
EXPENDS	.58	.22	.07	-.18	.05	.38	.10	-.02	.11	.59
PROGRAMS	.58	-.03	.34	-.04	-.02	.25	.11	.17	-.09	.56
INLIBMUS	.57	.10	.15	.35	.06	.07	.05	-.03	-.07	.50
MATSOWND	.54	.25	-.06	.21	-.02	.01	.29	.03	.20	.53
STAFFSIZ	.54	.40	.05	.10	.14	.16	.12	-.01	.25	.59
REFFILL	.54	.21	.13	.24	-.04	.14	.14	-.07	-.40	.61
STFEXPND	.54	.41	.05	.05	.08	.34	-.01	-.06	.28	.66
EQUIPUSE	.49	.08	.18	.33	.12	.13	.06	.10	.09	.44
LBUSECMD	.40	.08	.23	.32	.22	.15	-.11	.11	.18	.45
MGRCOMP	.17	.71	.16	.10	.13	.12	.05	.03	-.03	.60
STFMORAL	.20	.69	.18	.10	.10	.10	.06	.12	-.05	.60
STFQUAL	.26	.65	.17	.11	.05	.06	.23	.02	.01	.60
EFFICNCY	.22	.54	.13	.18	.18	.30	.06	-.12	.05	.53
POLICIES	.35	.53	.12	.14	.11	.20	-.04	.14	.14	.53
GOALS	.32	.53	.31	.15	.05	.12	.03	.18	.06	.55
STAFHELP	.07	.50	.27	.11	.19	-.18	.34	.09	-.09	.53
SAFETY	.04	.45	.06	.28	.30	.14	.04	.37	-.05	.53
INTFRDM	.15	.42	.12	.28	.02	.12	.19	.30	.03	.44
AWARENS	.20	.14	.60	.14	.16	.14	.07	.14	-.02	.51
USEREVAL	.37	.17	.56	.12	.05	.02	.07	-.06	-.04	.51
WLLBEING	.19	.14	.56	.03	.03	.24	.22	.14	-.06	.50
SVCSSUTD	.28	.17	.54	.02	.11	.14	.28	.05	-.06	.52
PUBOPIN	.38	.26	.52	.05	.14	-.07	-.01	.14	.08	.54
FLEX	.17	.37	.43	.30	.10	.10	.10	.01	.13	.48
RELCOMAG	.15	.28	.41	.30	.19	.29	-.01	.11	.19	.53
COMANAL	.34	.17	.40	.13	.03	.33	-.01	.04	.08	.44
STFSUTED	.06	.37	.39	.33	.22	.15	.16	-.16	-.02	.52
PR	.29	.32	.38	.22	.20	.19	-.03	.16	.24	.55
STFCNTCT	.28	.30	.38	.26	.12	.16	.16	-.12	-.10	.47
OTHCOLLS	.10	.21	.07	.62	.04	.16	.14	.18	.01	.52
ILL	.28	.20	.10	.57	.03	.10	.15	.15	.02	.50
COOP	.02	.21	.21	.50	.05	.29	.13	.10	.06	.44
SPEED	.12	.25	.12	.49	.31	-.10	.25	-.02	-.18	.53
MATSAVLY	.02	.04	.09	.46	.25	-.06	.44	-.14	-.13	.52
FREE	.08	.06	.11	.38	.19	-.04	.38	.32	.21	.50

BLDGAPPL	.09	.14	.15	.09	.70	.14	.08	-.06	.11	.58
LOCATN	-.03	.06	.16	.09	.68	-.01	.25	.07	-.01	.56
EASYID	.05	.05	.07	-.09	.63	.14	.01	.24	-.08	.49
PARKING	.01	.10	.02	.22	.57	-.07	.15	.25	-.05	.48
BLDGSUTD	.14	.26	.08	.14	.57	.17	.23	-.13	.18	.56
BOARD	.26	.31	.18	-.02	.08	.55	.01	.10	-.01	.51
VOLUNTRS	.27	.10	.24	.16	.09	.53	.04	.15	.11	.49
LIBPRODS	.10	-.03	.15	.35	.09	.52	.24	.05	.01	.49
ENERGY	.18	.27	-.08	.08	.29	.50	-.18	.19	-.20	.56
STAFFCE	.28	.45	.16	.20	.01	.46	.07	.02	-.23	.61
PLANNING	.34	.41	.27	.04	.01	.45	.09	.08	.01	.57
PUBINVD	.18	.15	.31	.34	.09	.38	-.01	.05	.28	.50
RANGEMAT	.05	.02	.08	.09	.06	.11	.70	.07	-.05	.53
RNGOFSVC	.09	.22	.10	.19	.10	-.05	.64	.11	.16	.56
HOURS	.01	.01	.21	-.06	.25	.15	.49	.14	-.18	.42
MATSQUAL	.11	.28	.01	.27	.25	-.05	.47	.11	.02	.46
NEWMATS	.10	.11	-.01	.34	.36	.14	.39	-.20	.11	.49
HANDCPD	.05	.12	.13	.11	.22	.29	.16	.61	-.05	.58
SPECGRPS	.15	.22	.21	.26	.14	.09	.26	.52	.13	.57
EIGENVALUE	17.92	4.10	2.09	1.89	1.58	1.54	1.31	1.20	1.08	
% OF VARIANCE	29.4	6.7	3.4	3.1	2.6	2.5	2.1	2.0	1.8	
CUM % OF VARIANCE	29.4	36.1	39.5	42.6	45.2	47.8	49.9	51.9	53.6	

Appendix N.
Factor Analysis of Performance, All Librarian Respondents

Indicator	FACTOR													
	1	2	3	4	5	6	7	8	9	10	11	12	13	h square
USRPCT	.75	.04	.11	.14	.16	.05	.09	-.06	.03	.08	.11	.13	.06	.67
LBUSCMD	.70	.01	.15	.12	.09	.15	.04	.14	.01	.01	.06	.10	.02	.59
VISITS	.70	.20	.14	.13	.06	.06	.20	.06	.16	.12	.01	-.01	.03	.65
CIRC	.64	.27	.06	.04	.02	.04	.24	-.06	.14	.07	-.02	-.10	-.01	.59
TURNOVER	.57	.17	.07	.07	-.01	.15	-.04	-.03	.09	-.05	.05	.06	.36	.53
AWARENS	.46	.11	.17	.12	.09	.03	-.03	.34	.24	.34	-.01	.15	-.09	.59
PROGRAM	.41	.04	.03	.01	.25	.03	.07	.15	.38	.05	.29	.02	-.01	.50
SVCSSUTD	.38	.23	.28	.14	.08	.10	.19	.28	.17	.23	.14	.14	-.14	.56
NEWMATS	.12	.71	.07	.07	.18	.09	.23	.11	.02	.06	.03	.07	.07	.65
MATSAVLY	.13	.69	.30	.11	.05	.05	-.08	-.04	.16	.02	.02	.05	.06	.64
MATSQUAL	.12	.63	.18	.20	.16	.18	.13	.12	-.07	.04	.13	-.02	.07	.61
RANGEMAT	.20	.61	-.07	.15	.15	.01	.20	.29	.01	.17	.01	.12	-.02	.62
MATSOWND	.04	.59	.07	.03	.40	.05	.16	.05	.03	.09	.11	.06	-.06	.57
RNGOFSVC	.15	.50	.10	.14	.22	-.05	.25	.32	.01	.25	.17	.18	.01	.64
STAFHELP	.09	.09	.72	.09	.01	.06	.14	-.02	.14	.14	.07	-.05	.05	.62
STFSUTED	.14	.05	.63	-.04	.01	.24	.18	.09	.13	.09	.08	.18	.09	.58
STFQUAL	.17	.12	.56	.24	.22	.05	.28	.09	.01	.06	.13	.04	-.07	.58
STFCNTCT	.10	.21	.52	.04	.11	.12	.30	.05	.08	.01	.11	.01	.14	.48
SPEED	.16	.48	.48	.11	.05	.04	-.07	-.02	.07	.09	.11	.17	.14	.58
PLANNING	.06	.10	.05	.70	.11	.06	.13	.06	.25	.11	.10	.16	.05	.66
POLICIES	.10	.17	-.04	.70	-.05	.05	.16	-.05	.15	.01	.02	.08	-.03	.59
MGRCOMP	.15	.06	.45	.51	.18	.15	-.10	.17	-.07	.03	.19	.01	.05	.63
GOALS	.22	.26	.30	.49	.20	.11	.01	.10	.07	.10	.20	.09	.05	.58
FLEX	.24	.16	.27	.48	.11	.10	-.04	.32	.04	.15	.09	.03	.13	.56
STAFFCE	.15	.04	.13	.43	.25	.02	.22	-.01	.13	.01	.25	.07	-.10	.43
STFMORAL	.17	.02	.37	.41	.26	.24	-.22	.21	.07	.04	.15	-.13	.11	.61
EFFICNCY	.20	.27	.36	.37	.14	.33	-.15	.08	.11	.02	.12	.05	-.03	.57
STAFFSIZ	.02	.15	.20	-.01	.74	.09	.05	.09	.03	.08	-.04	.07	.08	.65
STFEXPND	.08	.14	.05	.29	.70	.15	.05	.10	.06	-.02	-.02	.09	-.06	.66
EXPENDS	.22	.30	-.01	.08	.70	.03	.04	-.01	.14	.22	.01	.06	-.03	.71
MATSEXP	.20	.50	.03	.11	.60	.11	.11	.05	.03	.13	.06	.01	.01	.71
ENERGY	.12	-.05	.06	.15	.11	.67	-.01	-.04	.15	-.03	-.08	-.05	.01	.54
BLDGSUTD	.12	.21	.17	.05	.22	.64	.01	.02	.07	.26	.04	.07	-.01	.63
BLDGAPPL	.10	.04	.17	-.01	.11	.63	-.02	.06	.03	.38	.04	.08	.01	.61
HANDCPD	-.02	.06	-.04	.11	-.14	.61	.19	.16	-.01	.06	.12	.01	.05	.50
SAFETY	.13	.11	.20	.02	.09	.60	.01	.04	.08	-.09	.27	.04	.07	.54
EASYID	-.05	.05	.03	-.02	.04	.44	.08	-.06	-.06	.44	-.05	.24	-.01	.47

REFQNS	.29	.20	.18	.13	.11	.07	.64	.01	.05	.03	.17	-.03	.01	.63
REFFILL	.12	.27	.33	.11	-.07	.07	.57	.04	.19	.05	.14	-.10	.04	.61
INLIBMUS	.19	.15	.27	.04	.13	.06	.51	.14	.04	.01	-.07	.20	.21	.52
VARUSERS	.08	.13	.08	.02	.16	.04	.45	.25	-.11	-.06	.16	.34	.12	.50
FREE	-.03	.16	.01	.02	.07	.08	.12	.69	.03	-.12	.01	-.07	.16	.57
PR	.08	.05	.12	.32	.14	.01	-.03	.40	.36	.28	.12	.25	-.03	.59
RELCOMAG	.11	.09	.19	.21	-.02	.25	-.07	.38	.26	.11	.31	.28	-.11	.59
WLLBEING	.33	.20	.31	.12	.02	.07	.16	.38	.19	.03	.17	.10	-.20	.54
PUBOPIN	.34	.13	.35	.17	.16	.05	.08	.36	-.07	.05	.04	.28	-.02	.54
VOLUNTRS	.11	-.01	.15	.15	-.02	.04	.14	.01	.65	.03	.04	.05	.03	.50
BOARD	.14	.07	.04	.16	.17	.15	-.03	.04	.61	-.03	.06	-.02	.13	.50
PUBINVD	.13	.06	.14	.34	.01	.12	-.09	.12	.43	.06	-.06	.23	.20	.47
HOURS	.17	.15	.17	.12	.17	.01	.10	.01	.03	.58	-.06	.07	.19	.51
PARKING	-.02	.14	.12	.08	.03	.21	-.15	-.10	.04	.54	.10	-.18	.23	.61
LOCATN	.17	.11	-.01	.04	.12	.34	.06	.10	.01	.51	.16	-.08	-.04	.48
INTFRDM	.05	.10	.08	.19	-.02	.06	.12	.07	-.03	-.01	.61	-.11	.01	.47
COOP	.05	.02	.16	.12	-.06	.13	.08	.10	.14	.15	.55	.07	.16	.46
OTHCOLLS	.06	.20	.15	-.01	.03	.09	-.01	-.19	-.03	-.06	.55	.47	.12	.65
SPECGRPS	.14	.14	.15	.03	.22	.07	.16	.31	.26	.09	.36	.18	.01	.48
COMANAL	.02	.03	-.06	.37	.17	.04	.04	.01	.31	-.01	-.02	.54	-.02	.56
USEREVAL	.28	.21	.26	.20	-.01	.16	.02	.12	.01	-.07	-.05	.47	.09	.50
LIBPRODS	.14	.16	.05	.23	.25	-.04	.17	.12	.19	.21	.13	.40	-.06	.47
ILL	.03	-.01	.12	-.01	-.08	.01	.06	.01	.20	.13	.08	.03	.72	.61
EQUIPUSE	.24	.17	.05	.08	.12	.04	.26	.25	-.08	.16	.14	.01	.52	.57
EIGEN-VALUE	15.17	2.81	2.44	2.33	1.95	1.56	1.41	1.32	1.27	1.18	1.14	1.09	1.05	
% OF VARIANCE	24.9	4.6	4.0	3.8	3.2	2.6	2.3	2.2	2.1	1.9	1.9	1.8	1.7	
CUM %	24.9	29.5	33.5	37.3	40.5	43.1	45.4	47.5	49.6	51.5	53.4	55.2	56.9	

Appendix O
Factor Analysis of Role Ratings, All Librarian Resondents

	FACTOR		
ROLE	1	2	h^2
Community Activity Center.	.80	-.01	.70
Community Information Center	.74	.13	.56
Research Center	.71	.10	.51
Preschoolers' Door to Learning	.41	.41	.34
Popular Materials Library	-.16	.73	.56
Reference Library	.11	.66	.45
Formal Education Support Ctr	.21	.50	.29
Independent Learning Center	.39	.40	.31
Eigenvalue	2.44	1.21	
% of variance explained	30.5	30.5	
Cumulative % of variance explained	15.2	45.7	

Appendix P
Factor Analysis of Role Ratings, Library Directors Only

ROLE	1	2	3	4	h^2
Community Activities Center	.81	-.03	.03	-.16	.68
Community Information Center	.74	.28	-.08	.18	.66
Research Center	.62	-.07	.51	.10	.66
Preschoolers' Door to Learning	.22	.79	-.07	-.03	.67
Reference Library	-.13	.75	.36	.04	.71
Formal Education Support Ctr	.04	.15	.87	-.01	.78
Independent Learning Center	.12	.24	-.18	.77	.70
Popular Materials Library	.11	.26	-.23	-.76	.71
Eigenvalue	1.98	1.26	1.23	1.10	
% of variance explained	24.7	15.8	15.4	13.8	
Cumulative % of variance	24.7	40.5	55.9	69.7	

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